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BUSINESS WEEK



MOTIVATIONS

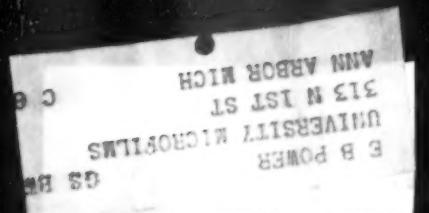
Why People Buy
Why They Work
How to Deal With Them

Business Week Reports to Executives on
the New Science of Motivations

Special Report Page 50

A McGRAW-HILL PUBLICATION

AUG. 14, 1954





The seasons won't wait . . . for breakdowns!

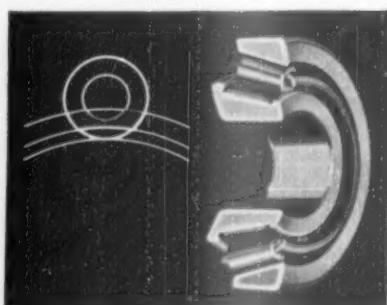
The weather's right . . . the time's right . . . there's not a day to lose! And thanks to the ingenuity and high quality standards of America's farm equipment manufacturers, your hardest working "hired-hand" is ready to roll. ★ This built-in dependability comes, to a large extent, from the use of quality parts, like Bower Spher-O-Honed Bearings. These rugged bearings incorporate exclusive design features—like the one shown at right—which make them last longer and perform better. Highest quality materials plus Bower's close attention to engineering detail have virtually eliminated maintenance. ★ If bearings are important in your product, specify Bower! There's a complete line of tapered, straight and journal roller bearings for every field of transportation and industry.

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ROLLER BEARINGS



HIGHER FLANGE IMPROVES ROLLER ALIGNMENT
As shown by the red area above, the higher flange provides a large two-zone contact area for the roller heads. This greatly reduces wear—practically eliminates "end play." Larger oil groove provides positive lubrication.



"Vision is Indispensable to Progress"

At the touch of a finger— man-made climate that's better than nature's

Since the beginning of history, Man has tried to "do" something about the weather around him. His problem: to keep warm in the winter, to keep cool in the summer, and to keep healthy all year round.

Man-made climate has been the goal of America's air conditioning industry since the first factory cooling units were installed in 1902. Now, a half century later, new ways have been found to heat, cool, filter, dehumidify, cleanse, and circulate the air that people breathe in homes, offices, factories.

Central air conditioning in the home has a bright future. Thousands of units have already been installed. Leading builders and manufacturers

predict that within five years complete temperature control units will be included in most new homes. The room air conditioner with a reverse cycle which permits either heating or cooling of the area served, as well as the electrostatic air cleaner, are two recent developments which will create new demands for air conditioning equipment.

Today, there are plans on the drawing board for an entirely air conditioned shopping center — in-

cluding sidewalks and public areas—all to be served by a central plant. Total annual sales of the industry are expected to skyrocket to \$5 billion within the next decade.

The air conditioning industry is playing a big part in America's growth and achievement. It is another demonstration of how the invigorating climate of freedom stimulates business to progress and accomplishment in which all the people share.

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in Buffalo was
always 'busy'..."



... until an officer of the Marine
Trust Company of Western New
York smoothed the way for me!"

Service of this kind can often be given to YOUR representative if The Marine Midland Trust Company of New York is your bank.

In 9 principal trading regions of New York State, affiliated Marine Midland banks have 127 offices serving 61 New York State communities. Their officers know local people and business as only local residents can. Let us show you how their on-the-spot "next-door-neighbor" knowledge can be helpful to your business.



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TRUST COMPANY**
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It's better business to buy Chevrolet trucks



They trim time and cut costs on the farm as in the city!

New Chevrolet trucks are saving time and money on all kinds of jobs these days. On farms . . . on cross-country runs . . . on city delivery routes, owners are finding that these great new trucks have everything it takes to do more work per day . . . more work per dollar.

You'll find it's true on *your* job, too. Whatever the size or type of truck you use, there's a new Chevrolet truck built to bring down your costs.

For example: Does your job require a stake or platform truck? New Chevrolet stake and platform models bring you more load space so that you can haul bigger, bulkier loads. As a result, you save extra trips. And the bodies

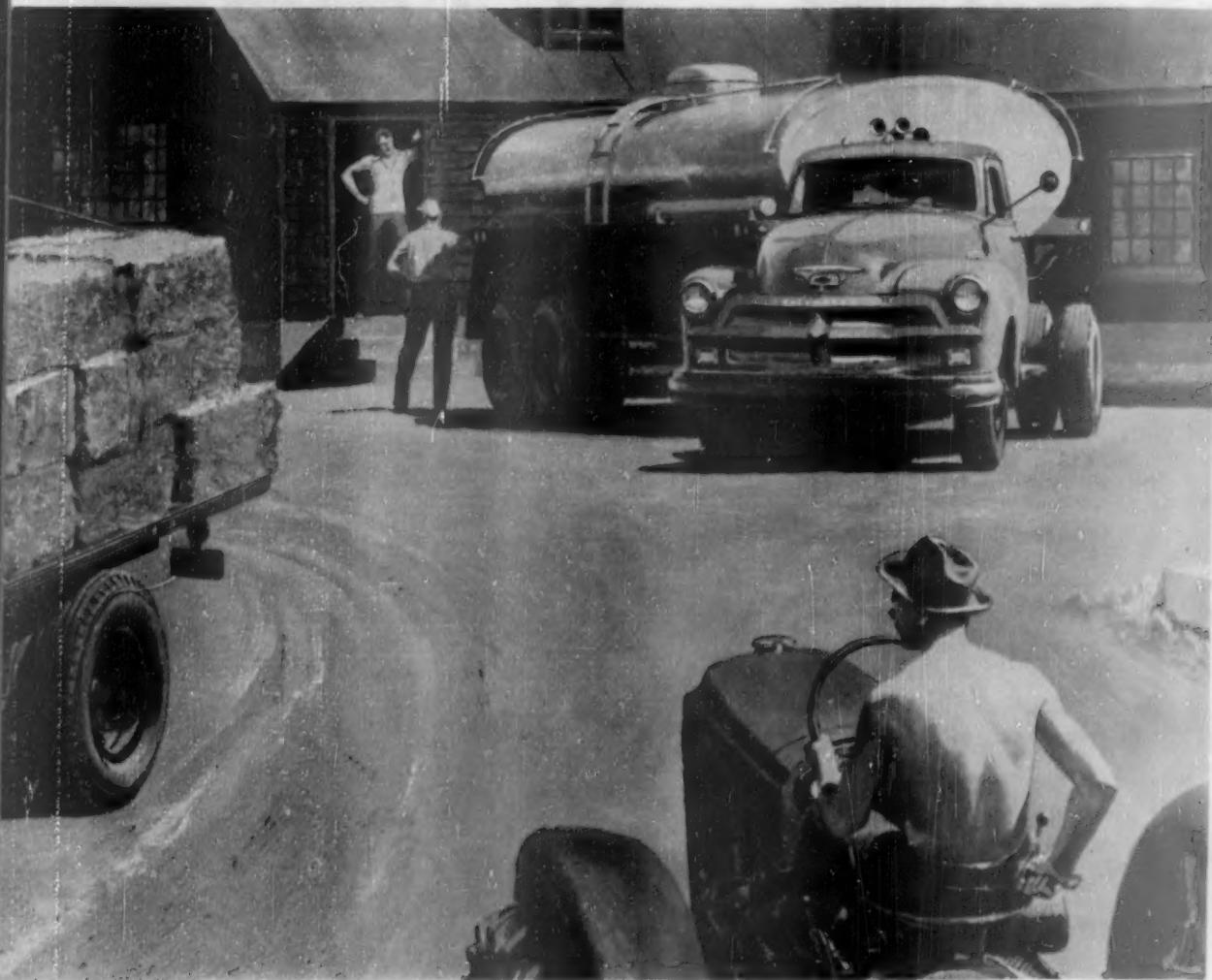
are set lower to the ground for faster, easier loading.

Or maybe you use pickups on your job. New Chevrolet pickups offer these same time- and work-reducing advantages. And they have a new tight-sealing tailgate that prevents leakage of sand, grain and other loose loads.

Here's something else you'll like. *Every* new Chevrolet truck delivers new hour-saving power plus increased operating economy.

Small wonder so many truck users in every field are choosing new Chevrolet trucks. Why not drop in and get the details—and the deal—at your Chevrolet dealer's. . . . Chevrolet Division of General Motors, Detroit 2, Mich.

CHEVROLET ADVANCE-DESIGN TRUCKS



NEW COMFORTMASTER CAB: Offers new comfort, convenience and safety. New one-piece curved windshield provides extra visibility. New instrument panel is easier to read and controls are easier to reach. It's the cab that has everything a truck driver wants!

New Chevrolet trucks offer more advantages you need and want—

NEW RIDE CONTROL SEAT:* Seat cushion and back move as a unit to "float" you over bumps. Eliminates annoying back-rubbing.

NEW CHASSIS RUGGEDNESS: Heavier axle shafts in two-ton models, more durable clutches in light- and heavy-duty models, stronger frames in *all* models.

NEW AUTOMATIC TRANSMISSION:* Proved, thrifty Truck Hydraulic transmission is offered on $\frac{1}{2}$ -, $\frac{3}{4}$ - and 1-ton models.

NEW ENGINE POWER AND FUEL ECONOMY: Bigger, brawnier "Thriftmaster 235" engine. Rugged, durable "Loadmaster 235" engine. All-new "Jobmaster 261" engine.* All three deliver new operating economy!

NEW, BIGGER LOAD SPACE: New pickup bodies have deeper sides. New stake bodies are wider, longer and roomier.

*Optional at extra cost. Ride Control Seat is available in all cabs of $\frac{1}{2}$ - and 2-ton models, standard cabs only in other models. "Jobmaster 261" engine available on 2-ton models.

MORE CHEVROLET TRUCKS IN USE THAN ANY OTHER MAKE!



6 parts of molded Du Pont simplify product design...



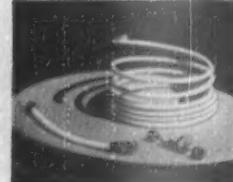
ZYTEL® nylon resin is a versatile Du Pont engineering material for mechanical applications. Parts made of it are strong, resilient, and lightweight. Often they require no lubrication. Parts of "Zytel" can be economically mass-produced by injection-molding or extrusion. Pictured are doctor's kit and instruments that use strong, smooth "Zytel."



ALATHON® polystyrene resin has good chemical resistance and excellent dielectric properties. "Alathon" is tough and flexible over a wide range of temperatures. Freedom from odor, taste, and toxicity makes it an ideal packaging material. Shown here is a pump with body block of "Alathon" that resists corrosion and abrasive slurries.



LUCITE® acrylic resin is used to make products that are both functional and decorative. The most beautiful of all engineering materials — it is produced clear and in color. Products of "Lucite" are shatter-resistant, have good dimensional stability and possess excellent resistance to weathering. Shown here is a novel lighter that's transparent.



TEFLON® tetrafluoroethylene resin is especially suited for use under severe service conditions. No chemicals normally found in industry attack it. "Teflon" can be used where service temperatures reach 500°F. Outstanding dielectric properties make "Teflon" ideal for electronic applications. Thin-wall electrical and chemical tubing is shown.

"ZYTEL"® nylon resin reduce wear and breakage



This new stereo camera has flash attachment, lens shields, view-finder, view-finder housing and slide button molded of lightweight "Zytel" nylon resin. The "Linex" is manufactured by the Lionel Corporation, Irvington, N. J.



REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

*"Zytel" is the new trade-mark for Du Pont nylon resin.

Precision-molded "Zytel" needs no finishing operations—helps lower production costs for new camera

The new "Linex" is a precision camera... engineered to take stereo shots in color you'll be proud to show. And 6 key parts of this smooth-working, compact camera are molded of lightweight Du Pont "Zytel" nylon resin.

Engineers of Lionel Corporation give several reasons for specifying parts of "Zytel" for the camera. The parts of "Zytel" are economically produced by precision injection molding, and these intricate pieces require no finishing. One molded piece can replace an assembly of parts.

The mechanical properties of "Zytel" are important to this camera also. The lens shield and housing won't crack or break, because "Zytel" is tough and resilient. The shutter slide button stands up to wear, and gives long, trouble-free service, because "Zytel" is wear-resistant, and dimensionally stable.

Have you investigated the properties of "Zytel" nylon resin and other members of the Du Pont family of engineering materials—"Alathon" polyethylene resin, "Lucite" acrylic resin and "Teflon" tetrafluoroethylene resin? The applications shown here are typical product improvements—possible when design and service requirements are evaluated in terms of the properties of these unique engineering materials. For further information on the properties and uses of these materials, use the coupon below or write to E. I. du Pont de Nemours & Co. (Inc.), Polymers Department, Room 338, Du Pont Building, Wilmington 98, Delaware.

E. I. du Pont de Nemours & Co. (Inc.), Polymers Department
Room 338, Du Pont Building, Wilmington 98, Delaware

Please send me more information on the Du Pont engineering materials checked: "Zytel" nylon resin ; "Alathon" polyethylene resin ; "Lucite" acrylic resin ; "Teflon" tetrafluoroethylene resin . I am interested in evaluating these materials for _____

Name _____

Title _____

Firm Name _____

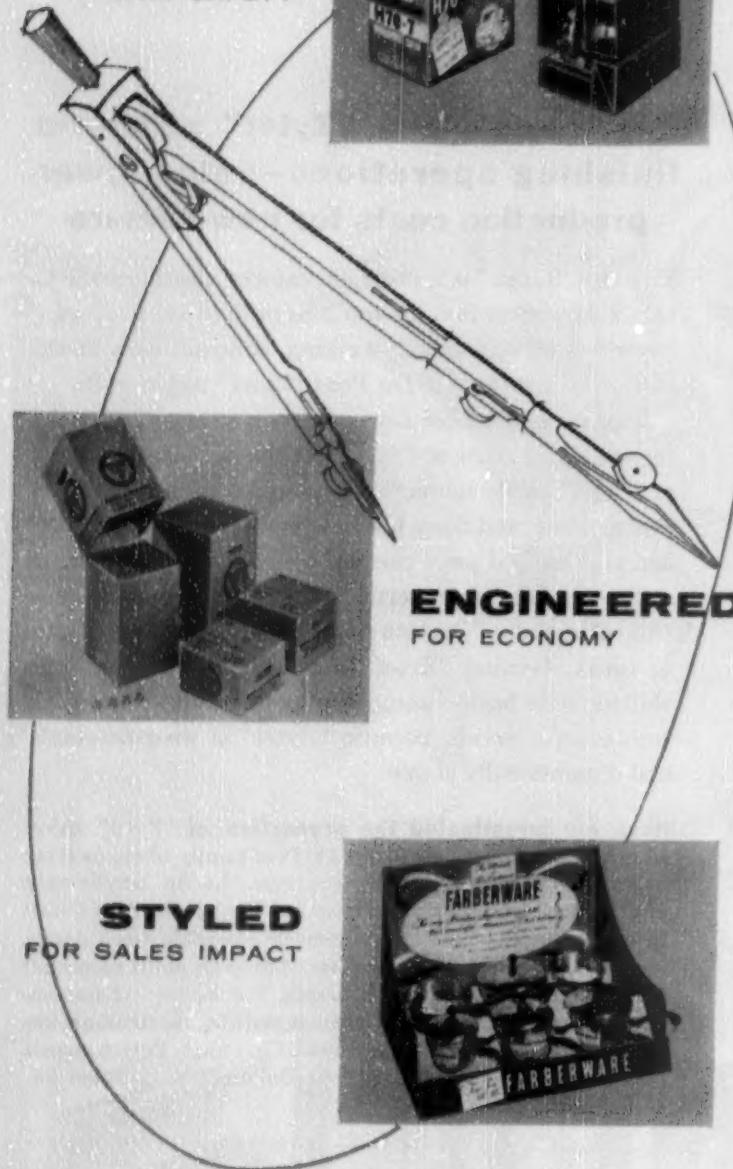
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Hinde & Dauch, Sandusky 1, Ohio

READERS REPORT

A Contributory Cause

Dear Sir:

In your issue of Jul. 17, on page 88, you give us an excellent summary of the developments being made at General Motors and elsewhere in the prevention of industrial fires.

. . . One phase of this prevention program, however . . . deserves emphasis. . . . I believe that a better means should be used in more industrial plants to remove one of the large contributory causes of bad fires, namely, the presence of excessive grease.

. . . I feel that we are making a real contribution by urging that the guns of a two-nozzle Hyperspray Jenny be placed in such a way that they automatically clean conveyor chains as they pass, thus practically eliminating the necessity for expensive hand labor, while accomplishing the desired end, which is the removal of excessive grease quickly and thoroughly.

Many other jobs, of course, require the personal direction of vapor spray with detergent in it, but it should become apparent that this type of prevention of fires has a definite place in the picture. . . .

F. E. SCHUCHMAN
PRESIDENT-GENERAL SALES MANAGER
HYPERSPRAY JENNY DIVISION
HOMESTEAD VALVE MFG. CO.
CORAOPOLIS, PA.

Ticks, Tykes & Tweezers

Dear Sir:

In your Personal Business department [BW—Jul. 24 '54, p. 128], you recommend using tweezers to remove ticks, thus avoiding the danger of contracting Rocky Mountain Spotted Fever. If the writer . . . had ever attempted to remove a tick from a dog with tweezers, he would know that it is impractical. The tweezers wrench away the body, leaving the head embedded in the skin where it festers. The result is a painful sore, a trip to the vet, and a . . . bill for treatment.

The correct procedure for removing a tick from a dog is as follows:

Heat a large needle with a match or cigarette lighter until it is red hot. Then, wearing a glove, poke the hot needle into the tick longitudinally—along what would be the tick's backbone if it had one. The

NORTH AMERICAN HAS BUILT MORE AIRPLANES THAN ANY OTHER COMPANY IN THE WORLD



A new F-100 *Super Sabre* in level flight smashes through the sound barrier over a remote test area creating a gigantic shock wave—the Sonic Boom.

SONIC BOOM!

THUNDERING SIGNAL OF AVIATION'S PROGRESS FOR NATIONAL DEFENSE

Called "mysterious thunder" when first heard, Sonic Booms have demonstrated to Mr. Average Citizen the fact that we have entered the era of everyday supersonic flight. The mere idea that an airplane flying through the air can produce a sound "like thunder on a clear day" may seem fantastic. Actually a Sonic Boom is a perfectly natural occurrence . . . a sort of gargantuan "pop" . . . brought about by a jet plane flying faster than sound. Very much like waves made by a motorboat on a lake . . . a jet creates gigantic shock waves in the air . . . so immense, that when they reach us on the ground, they sound like thunder or a rumbling explosion.

Once a surprising new sound . . . the cause of Sonic

Booms is now understood, and positive steps minimize the probability of Booms over our homes. For instance, North American began early testing at supersonic speeds over remote areas. These experiments have led to rigid control of all flights. Today, the aircraft industry and the Armed Forces prevent disturbing Booms by making supersonic flights at extreme altitude or away from our cities and towns.

While you read these words, planes designed and built by North American . . . like the F-86 *Sabre* Jet and the new F-100 *Super Sabre*—America's first operational fighter to fly at supersonic speeds in level or climbing flight—fly vital defense missions without disturbing your daily life.

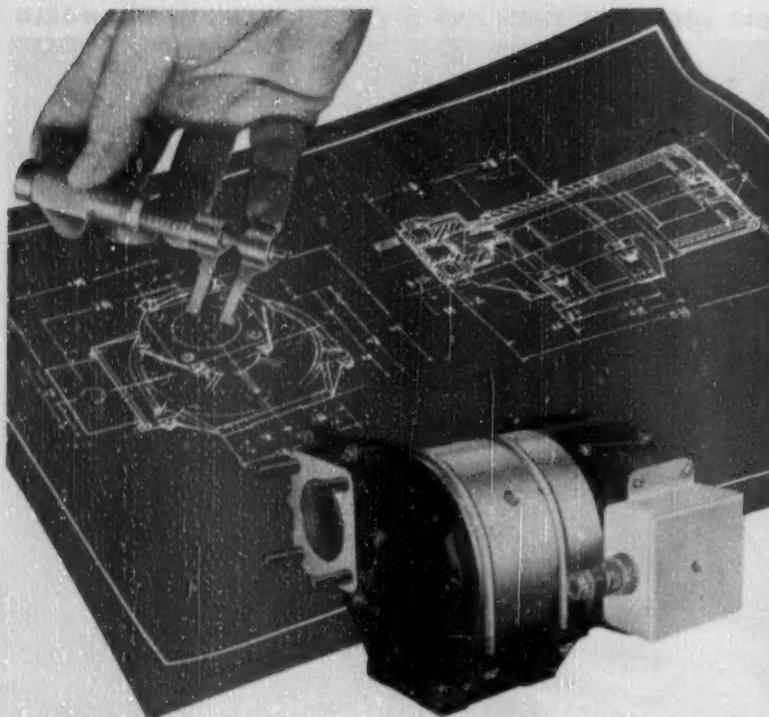
Engineers: North American offers unusual opportunities to qualified engineers seeking a challenging future. Please write: Engineering Personnel Office, Los Angeles or Downey, California; or Columbus, Ohio.

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Many manufacturers of motor-driven products have found that the use of a Lamb Electric *special application* motor results in better products and lower costs.

Our high degree of specialization in both equipment and methods provides the advantages of custom manufacture on a volume basis. High quality and controlled costs go hand-in-hand.

We shall welcome the opportunity to demonstrate the benefits of a Lamb Electric special application motor for your products.

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Lamb Electric
SPECIAL APPLICATION
FRACTIONAL HORSEPOWER MOTORS



For home appliances and similar applications.



For light power uses of an intermittent nature.



Motor with efficient spur gear speed reducer.

heat will cause the tick to release its hold, and both head and body will come loose, impaled on the needle. An additional advantage . . . is that the heat sears the tick's body, killing any germs it may be carrying. . . .

J. L. TROY

BOSTON, MASS.

* Our critic's suggestion for removing ticks is most ingenious. However, he missed the point—the article was not on dogs; it was on Rocky Mountain Spotted Fever: how human beings catch it, spot it, prevent it, and cure it. We relied on what medical books and authorities said was the safest method of removing ticks. They were agreed that tweezers are best.

A Little Premature

Dear Sir:

How a Big Computer Takes Over [BW—Jul. 24 '54, p. 58] contains the following incorrect statement regarding our use of Univac.

"In May, GE's appliance division at Louisville started using its new Univac for complete processing of its 12,000-employee payroll."

. . . Our plans call for converting payrolls to the Univac system in September of this year.

R. F. OSBORN
MANAGER—BUSINESS PROCEDURES
GENERAL ELECTRIC CO.
MAJOR APPLIANCE DIVISION
LOUISVILLE, KY.

Motivations . . . and Hats

Dear Sir:

Re Warren S. Smith's letter [re hats and tipping] on page 14 of the Jul. 3 issue of BUSINESS WEEK . . . it was a surprise to me that anyone in the hat industry would take such estimates as a criticism. To my knowledge, there is no other item of consumer merchandise which, as the editors emphasize, "you spend more money keeping . . . than you did buying."

Much of my work is in consumer motivation studies and symbolism. Although I have limited data on the subject I am convinced that some very special psychology attaches to the hat as a symbol in people's minds. In part, this may suggest an answer to the question Reader Smith raises as to why they call it a "hat" check when far more expensive items like the coat are commonly cared for there. There is simply something very powerful and symbolic about a man's hat, and I see it as an advantage to the



J-M Movable Walls in both solid panels and panels with glass openings are combined to create this attractive and efficient office

Make your space fit your needs!

Johns-Manville Asbestos Movable Walls provide offices when and where you want them

YOU can rearrange existing offices or partition new space quickly and economically with Johns-Manville Asbestos Movable Walls.

These flush-type, asbestos panels have a clean, smooth surface that's hard to mar, easy to maintain... and extra strong to withstand shock

and abuse. Also, they are light in weight, easy to install and relocate. The "dry wall" method of erection assures little or no interruption to normal business routine.

Johns-Manville Asbestos Movable Walls may be used as ceiling-high or free-standing partitions. The

complete wall, including doors, glazing and hardware, is installed by Johns-Manville's own construction men under the supervision of trained J-M engineers—responsibility is undivided.

An estimate will convince you that the cost of J-M Movable Walls compares favorably with other types of wall construction. For details write Johns-Manville, Dept. BW, Box 158, N. Y. 16, N. Y. In Canada write 199 Bay St., Toronto 1, Ont.

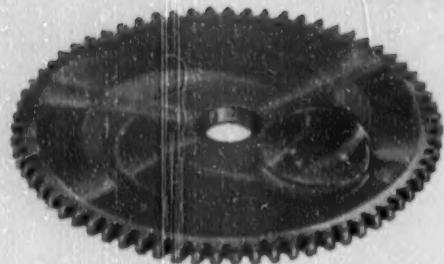
JM Johns-Manville



Movable Walls

INSTALLED NATIONALLY BY JOHNS-MANVILLE

moisture is a menace



Less than a drop of water can spoil a good product. Excessive humidity causes corrosion, fogging, fungus growth, and loss of dielectric strength.

In food and pharmaceuticals, as well as most packaged products, deterioration may occur after packaging unless humidity is controlled within the package.

DriAire products for the control and indication of humidity are available in the following types:

DriAire Dehydrators

7 standard sizes for protection of reciprocating engines and other equipment. Permit external inspection of interior humidity conditions. (AN designated.)

Humi-Caps

Small dehydrators of one-piece transparent plastic construction. Produced in 3 sizes. May be handled mechanically for economical packaging. Indicator types also available.

Humi-Spots

Humidity indicator cards impregnated to show 1 or 3 different percentages of relative humidity. Meet current military specifications.

Humi-Eyes

External humidity indicators that show conditions within any flexible or rigid barrier. Especially designed for method II military packages.

As the largest manufacturer and designer of dehydrating and humidity indicating devices, DriAire will welcome the opportunity to assist you with your dehydration problems. Your inquiries are invited.



DriAire

INCORPORATED

SOUTH NORWALK, CONNECTICUT

industry that executives value their hats so highly.

I have checked my estimates [that the average businessman pays about \$50 per year—about five times the original price of the hat—in tips for checking it], and they still seem sound to me. In his letter, Reader Smith offered no survey data or observation data to indicate how far apart we are in our estimates. . . . Perhaps his company [Hat Research Foundation, Inc.] is in a good position to make an objective breakdown of the total cost of all items checked and the proper portion to be allocated to the man's hat. . . .

JAMES M. VICARY
JAMES M. VICARY CO.
MARKETING & OPINION RESEARCH
NEW YORK, N. Y.

Timely Timepieces

Dear Sir:

Re . . . raising the tariff to enable our American manufacturers to compete with Swiss-made watches (BW—Jul. 31 '54, p30), the solution does not lie in limiting foreign imports nor subsidizing a submarginal industry. The American idea is free competition, and neither an arbitrary tariff nor subsidizing is the proper stimulant to our free enterprise democracy. What this country needs is a good research program.

We have given some thought to the field of watchmaking, and wondered if the general design of a watch has followed the same basic pattern for several hundred years or whether a radical change in mechanical design is possible. . . . With the marketing desires of consumers and industrial applications toward a general trend of smaller and more compact timing devices, maintaining and demanding precision through adverse conditions . . . the balance wheel-lever escapement leaves much to be desired as a regulating mechanism.

Has work been done along the line of replacing the lever type escapement by a radically different form, such as fluid drive regulator or transistor type voltage regulator? To what extent has thinking been done along the lines of designing a miniature frequency controlled vibrator watch?

Among the many factors that enter in the optimum design of a time device are extreme temperature variation, deformation due to shocks, linear and non-linear vibrations, maintenance of a constant lubricating source, violent changes of directional positioning including

CROWN

SPRA-TAINER® Does It Again!

KILLS

LAWN
WEEDS

Roots
and All!

No Mixing-
No Fixing



Spray the leaves, kill the roots! Dandelions, plantain, pigweed, ragweed and other pesty broadleaf weeds are all destroyed by WEED A BOMB.

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"Modern Design" and "No Top Seam, No Side Seam"

construction are exclusive Crown-engineered features of SPRA-TAINER which make it sell. All other cans in Crown's Complete Line are similarly distinguished by a difference in quality of design and construction which means more sales for the products they carry. Let us guide you to Profitable Packaging. Start by asking a Crown Sales Representative to call!

One of America's Largest Can Manufacturers

CROWN CAN
DIVISION
CROWN CORK & SEAL COMPANY, INC.

PHILADELPHIA • CHICAGO • ORLANDO • BALTIMORE • NEW YORK • BOSTON • ST. LOUIS



"—A secret stream . . . 5½ pound trout." Mr. Stahl with Wausau's Ed McEachron.

What is there about Wausau, Wisconsin, that makes it the ideal home for one of the world's most important insurance companies?

Employers Mutuals invited a famous American artist to visit its hometown and find out.

Wausau Story

By BEN STAHL, Noted artist; faculty member, Famous Artists Schools, Westport, Conn.

DISCOVERING a new town is like painting a picture. You start with a sketch. I knew only that Wausau was deer and fishing country, a humming business community, and a famous ski resort.

But the picture starts coming to life when you fill in your sketch with color . . . with people. This began to happen when I met Mrs. Joseph Coates.

This remarkable 84 year old woman greeted me as if we'd been friends for years. We chatted of Wausau's lumber days and the Scots and Germans who settled there in the early 1800's. It was "Bull River Falls" then.

"Our people work hard," Mrs. Coates said, "but they know how to enjoy life. We have a symphony orchestra of 50 members. And our Wisconsin Valley Art Association. Both are supported by our citizens—many from our larger companies, including Employers Mutuals."

Enjoy life? Take Ed McEachron. He's president of Wausau's Marathon Bait Company, one of the country's largest makers of fishing lures. Ed personally tests every new lure and fly himself (listen to this, fishermen!) in a "secret" stream not far from Wausau where the trout average 5½ pounds. He wouldn't say exactly where it was.

I ended with a good picture of why this very "real" city is an ideal home for Employers Mutuals. Much of Wausau's ways must rub off on the company. Much of the company's ways must rub off on Wausau. And both ways, it's good.



Employers Mutuals of Wausau are "good people to do business with"

There's a *Wausau personality* that you don't have to go to Wausau to find. It's a way of doing business. You'll find it in all our 89 offices throughout the country. We handle



Mr. Stahl talks art with Wausau's Jeanette Coates . . . inspects one of her paintings, discusses his own illustrations for a new edition of a famous Bible.

all lines of casualty and fire insurance, and are one of the world's largest writers of **workmen's compensation**. We have a high reputation in this field.

If you think workmen's compensation insurance is just "a convenient way to pay the inevitable cost of accidents," you

should talk to an Employers Mutuals man. He can show you that, more than in any other kind of insurance, the cost of a workmen's compensation policy is controllable. The better the company, the more controllable. Phone our local office, or write Wausau, Wisconsin.

Rib Mountain



Employers Mutuals of Wausau

torsion, optimization of compact pivot points versus the rigidity for longitudinality minimizing friction, general wear, constant source power requirements, and an innumerable number of secondary factors . . .

With advanced research along this line, there could be developed a radically different form of regulatory mechanism. . . . For example, the fluid drive regulator would eliminate the lubrication problem and frictional effects. . . .

We have given some thought to one factor—mass production—which seems to plague the entire watch industry, costwise and quality-wise. . . . There are some mathematical tools available . . . whereby the optimization of correcting the infinitesimal defects in the fabrication due to the impossibility of strict quality control in both the raw material and production machinery and human bias is possible. . . .

American manufacturers should go all out into the chronographs and auto-wind field. . . .

SAMUEL I. PLOTNICK

DIRECTOR

MATHEMATICS RESEARCH, INC.
STATE COLLEGE, PA.

Landlord Unaware

Dear Sir:

After reading your story, The New Landlord, in your July 17 issue on page 46, we would like to say that all of the industrial lease-rental contracts we have seen or made are strictly net income leases. We simply collect rentals from the client and let him rent the houses to employees as he sees fit. If he subsidizes, we are not aware of it. If the houses are not occupied, we are not aware of it. He also pays all maintenance, insurance and taxes.

The big advantage we see to rental housing is the release of money for other, and perhaps more important, capital expenditures. . . .

ROBERT E. AHRENS

VICE-PRESIDENT

SOUTHERN MILL & MFG. CO.
TULSA, OKLA.

Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 36, N. Y.

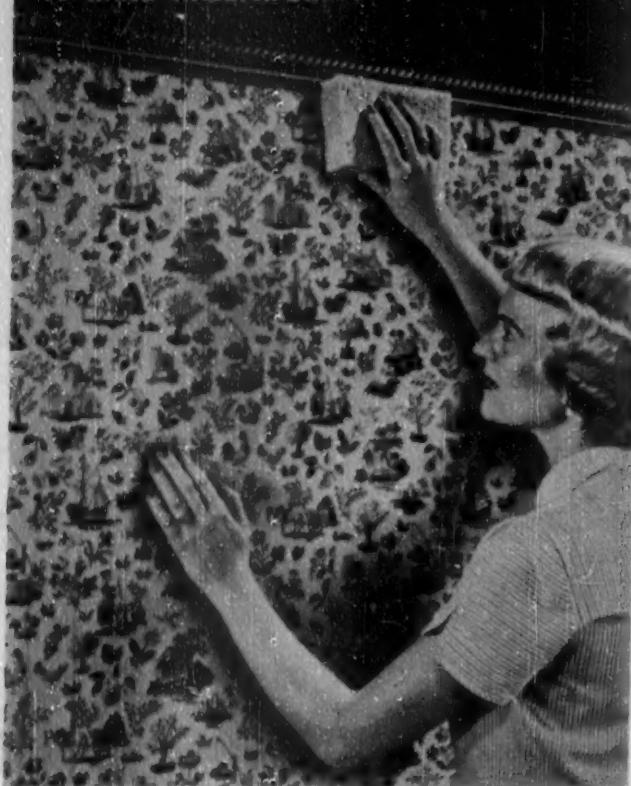
You can buy a cheaper  valve than this  one . . . but you can't buy one that costs less   to use. You'll use it in  petrochemical plants to control thin gasses  . . . or on big  pipe lines carrying heavy crude oils or for hot acid  or alkaline slurries in process industries. Engineers  specify this valve because it is always efficient and dependable . . . operating people   like it because it opens quickly and easily  and never  leaks Even purchasing agents and  comptrollers like it because they've learned it's the thriftiest  valve they can buy and that it always pays big dividends  in lower operating and replacement costs. The valve?

ROCKWELL-NORDSTROM, of course. Write for a  catalog today. Rockwell Manufacturing Company, Pittsburgh 8, Pa.

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Peacock Brothers Limited

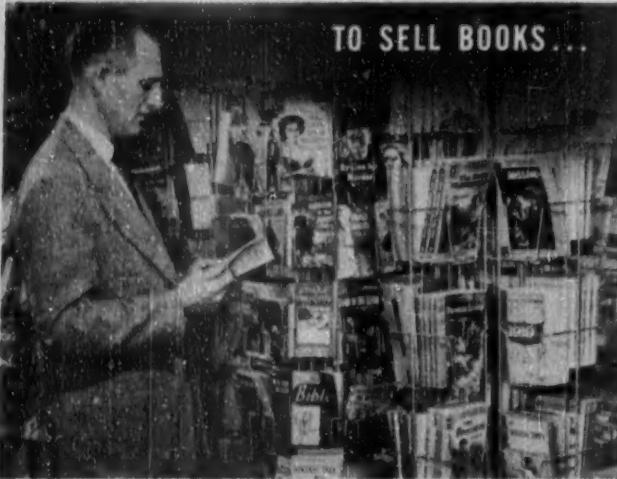


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PRE-PASTED WALLPAPER, such as that manufactured by The Birge Company, uses Hercules® CMC to provide a non-staining type paste with adequate slip, permitting ample time for aligning patterns. And to retain its strength when wet, pre-pasted wallpaper relies on Kymene® resin.

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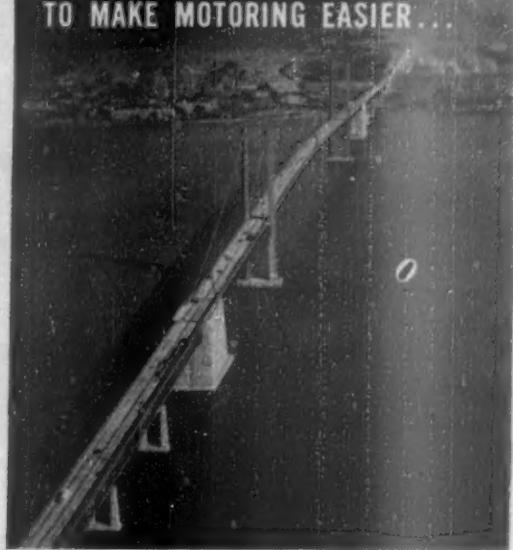
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HOW HERCULES HELPS...



Most businesses are helped today by Hercules' business... the production of synthetic resins, cellulose products, chemical cotton, terpene chemicals, rosin and rosin derivatives, chlorinated products, and many other chemical processing materials—as well as explosives. Through close cooperative research with its customers, Hercules has helped improve the processing or performance of many industrial and consumer products. We welcome the opportunity to work with you.

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BETTER DRIVING is in store for vacationists on highways and bridges protected during winter against ice or snow with Vinsol®, a Hercules-pioneered air-entraining agent in the cement. Also, Parlon®-based paints find wide use for road and crosswalk markings, and other traffic safety devices.

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BUSINESS OUTLOOK

BUSINESS WEEK
AUG. 14, 1954



Business leaders are confident of an upturn—but the economic signals are still mixed.

Businessmen are probably more confident than they've been at any time this year. And this is the year when business confidence was one of the chief strengths that kept the recession from getting deeper.

But most economic indicators are neutral. There are only a few—a very small minority—that signal sharp movements up or down.

Over-all the figures suggest a firm but level path for business in the months ahead.

You can feel the cross-currents in these key business figures:

- Retail sales stay firm, have a healthy tone.
- Stock prices are rising again, reflect optimism.
- Production is level, but still is expected to turn up.

—•—
Retailers' cash registers right across the nation have rung up a plus for business this summer.

The customers have kept their spending up in the face of recession.

With jobs and personal incomes holding steady, the customers seem convinced that this is a good time to buy.

Employment—when you compensate for seasonal swings (page 28)—is remarkably steady.

And incomes in the first half ran to almost exactly the same figures as were reported a year ago.

Wall Street, to be sure, was doing some selective second-guessing early this week.

Oils, motors, and steel—all favorites this spring—were beginning to look a little less attractive to some.

But there's still no sign of a general wash-down coming. The sell-off did little to shake business confidence.

Look for a rise in industrial production. Retail stores—everyone except auto dealers—did better in July; this month factories should see the first benefits of the stepup.

But an improvement in orders may not push up the over-all index of factory output. Auto model changeovers (page 26) will be slowing down assembly lines in Detroit. Steel is already feeling the pinch. Production this week is scheduled off a shade from last week.

—•—
Automobile salesmen, too, are feeling the impact of the 1955 models. Customers are apparently waiting for the new jobs.

July sales of autos and parts were off \$450-million from June.

That made July the poorest month, sales-wise, for the auto industry since February.

More important, sales were running behind last July. They were almost \$500-million below the year-ago figures.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
AUG. 14, 1954

Old-timers used to expect a June-to-July dip in sales. That was the normal seasonal for the trade.

But in most postwar years, there's been no such dip.

Last year, for instance, July sales actually ran slightly ahead of June.

There's been no help for the auto makers from their truck lines.

This month truck plants are scheduled to produce only 74,000 units—the lowest monthly figure, except for strikes, since way back in November, 1949.

Unfortunately, model changeovers aren't the trouble in trucks.

The military has cut its buying sharply. And business users seem to be making their light-duty trucks take a lot more punishment before they scrap them these days.

—•—

But when you look at lines other than autos, there's encouraging news this summer.

July sales were up \$200-million, by the Commerce Dept. flash reports.

The July figure was \$11.7-billion. That was well ahead of last July and nicely above the consistent figure—just under \$11½-billion—run up in each of the spring and early summer months.

The lines doing best are just what you'd expect in the summer.

Gasoline stations, helped by vacation travel, rang up sales a little over \$1-billion—almost 10% ahead of a year ago. That was their best gain over 1953 in any month this year.

Sporting goods stores are going fine. And relaxed summer living has sent more and more families to the eating and drinking establishments.

Even with vacations, though, women spent an amazing \$3.7-billion for groceries in July. That was \$300-million above the June figure and well above July, 1953.

One reason may be hot kitchens. Housewives may be spending more to get the quicker, pre-processed foods that make living easier.

Summer also helped the apparel trade. With customers swinging more and more to informal clothing, sales managed to sneak ahead of the year-ago figures for the first time since Easter.

The mail order houses and department stores had their best month since Easter by seasonally adjusted figures. Sears reported its first year-to-year gain since August of last year.

Still, there are many lines blaming summer for their troubles.

Sales of durable goods are still jogging along just below last year's level.

Furniture and appliances took their usual summer slump.

And—in spite of the do-it-yourself boom—lumber and hardware merchants saw their sales fall from both the June and year-ago levels.

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*Opportunity grows where
independence began*

*The Mall, now under construction,
extending north from Independence Hall,
in Philadelphia, reveals this
historic building in all its glory.*



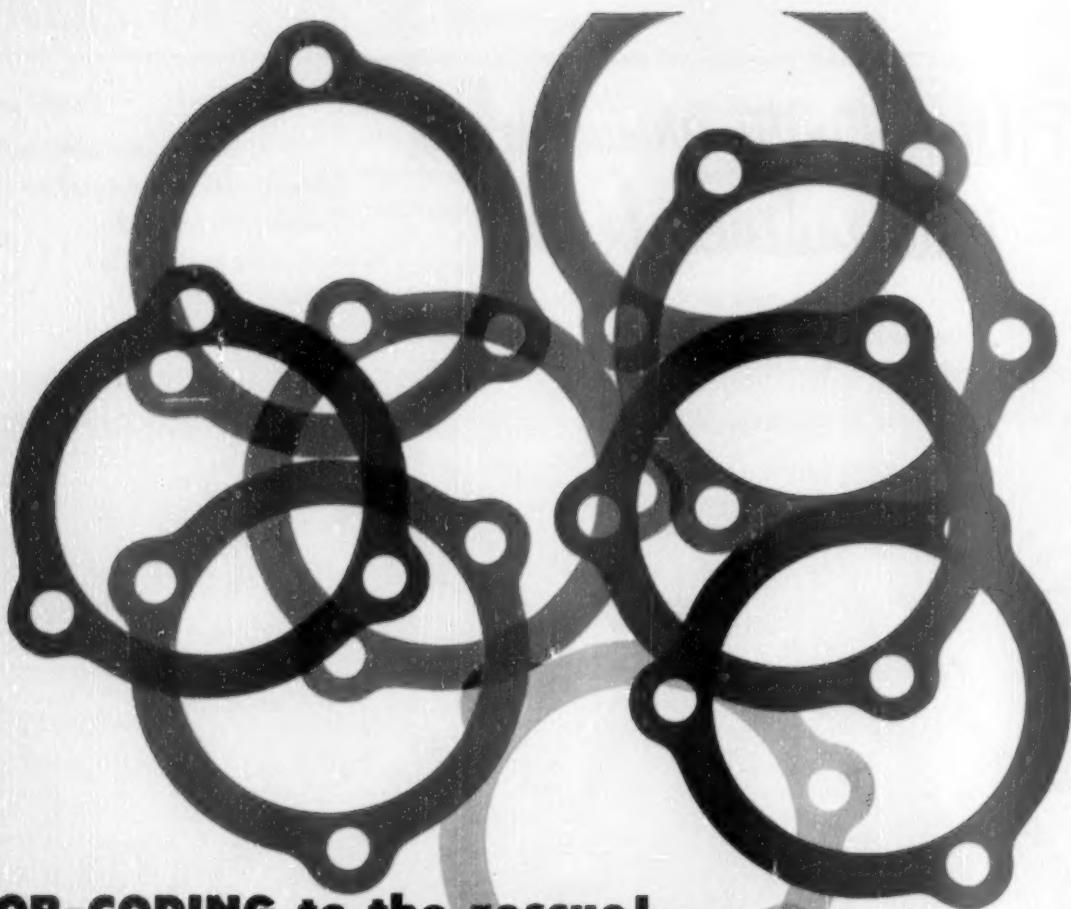
The greatest industrial news of our time is being made in dynamic Delaware Valley, which offers unlimited opportunities to commerce and industry. If you are planning expansion or relocation of your business, consider the advantages of this area. You will find a magnificent seaport, unequalled rail and highway facilities, and a great international airport. Other assets

include versatile and skilled workers, raw materials, a market of 20 million persons within 100 miles . . . and an abundant supply of electric power, now and for the future. It's sound business to "set your site" in Greater Philadelphia, the heart of Delaware Valley.



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Visit historic and modern Philadelphia on your vacation



COLOR-CODING to the rescue!

Think of it! Gaskets, shims, washers—Kodapak Sheet in various colors—each different color a different thickness!

If the blueprint calls for an .018" clearance, select 3 washers: a brown (.010"), a blue (.005"), a green (.003"). The three together give a total thickness of .018", exactly what the designer ordered. No fooling with micrometer-caliper

measurements! Truly, the happy marriage of a brilliant idea and a versatile product!

No wonder industry is using these thickness washers by the millions! No wonder the makers are using Kodapak Sheet, which they overcoat in their own distinctive colors.

Because Kodapak Sheet is uniform in gauge; dimensionally stable . . . has a decomposition point in excess of 400F . . . is resistant, impervious to water and oil—does not lose strength or form in use.

Does this give you IDEAS? Does it suggest ways to use washers? Other ways to use color-coding? Other ways to use Kodapak Sheet? If so . . . Good!

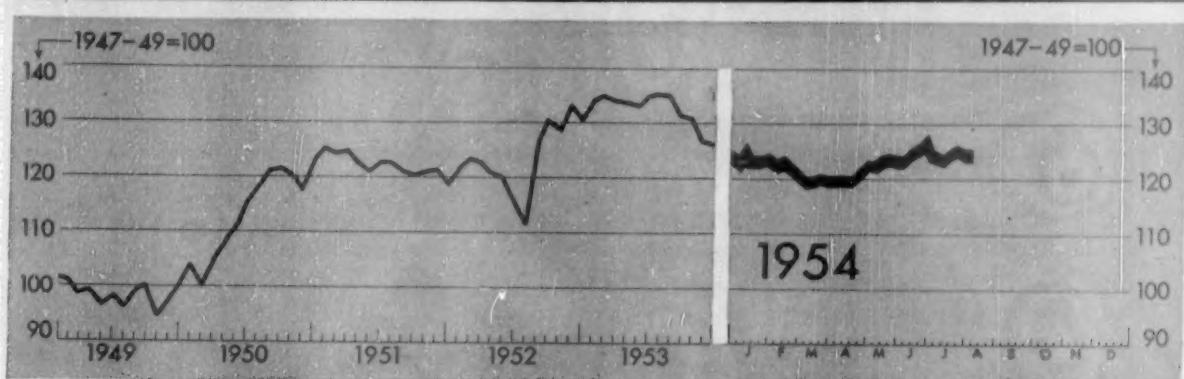
For information, for the names of firms handling this material, call our representative or write:

**Cellulose Products Division
Eastman Kodak Company, Rochester 4, N. Y.**



Sales offices: New York, Chicago, Dallas. Sales representatives: Cleveland, Philadelphia, Providence. Distributors: San Francisco, Los Angeles, Portland, Seattle (Wilson & Geo. Meyer & Co.); Toronto, Montreal (Paper Sales, Ltd.).

FIGURES OF THE WEEK



Business Week Index (above) *125.2 †125.2 124.4 134.4 91.6

PRODUCTION

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Steel ingot production (thousands of tons)	1,519	1,527	1,534	2,146	1,281
Production of automobiles and trucks	123,611	130,523	106,169	137,671	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$54,558	\$55,051	\$59,407	\$49,534	\$17,083
Electric power output (millions of kilowatt-hours)	9,059	9,139	8,185	8,464	4,238
Crude oil and condensate production (daily av., thousands of bbls.)	6,153	6,255	6,281	6,538	4,751
Bituminous coal production (daily average, thousands of tons)	1,250	1,182	1,455	1,543	1,745
Paperboard production (tons)	245,341	237,843	126,542	261,943	167,269

TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	66	65	67	74	82
Carloadings: raw materials (daily av., thousands of cars)	48	49	48	58	53
Department store sales (change from same week of preceding year)	+1%	+1%	+18%	-1%	+30%
Business failures (Dun and Bradstreet, number)	207	195	196	195	22

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	429.7	427.7	431.8	415.9	311.9
Industrial raw materials, daily index (U. S. BLS, 1947-49 = 100)	85.6	85.8	86.5	85.3	††73.2
Foodstuffs, daily index (U. S. BLS, 1947-49 = 100)	99.2	98.4	99.6	91.4	††75.4
Print cloth (spot and nearby, yd.)	18.9¢	19.0¢	19.1¢	21.1¢	17.5¢
Finished steel, index (U. S. BLS, 1947-49 = 100)	144.5	144.5	143.0	141.7	††76.4
Scrap steel composite (Iron Age, ton)	\$27.83	\$27.83	\$26.58	\$44.42	\$20.27
Copper (electrolytic, Connecticut Valley, E&M), lb.	30.000¢	30.000¢	30.000¢	29.935¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$2.36	\$2.37	\$2.23	\$2.22	\$1.97
Cotton, daily price (middling, ten designated markets, lb.)	34.27¢	34.45¢	34.34¢	33.04¢	30.56¢
Wool tops (Boston, lb.)	\$2.25	\$2.25	\$2.25	\$2.12	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's)	242.0	245.2	238.7	196.7	135.7
Medium grade corporate bond yield (Baa issues, Moody's)	3.50%	3.50%	3.50%	3.84%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	1 1/8%	1 1/8%	1 1/8-1 1/4%	2 1/8%	1 1/8-1 1/4%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks	54,217	54,949	53,311	53,177	††45,820
Total loans and investments, reporting member banks	83,548	81,445	81,101	79,870	††72,036
Commercial and agricultural loans, reporting member banks	20,770	21,524	21,728	22,799	††9,299
U. S. gov't guaranteed obligations held, reporting member banks	36,605	34,221	33,575	32,535	††49,879
Total federal reserve credit outstanding	25,105	25,263	25,736	26,153	23,883

MONTHLY FIGURES OF THE WEEK

	Latest Month	Preceding Month	Year Ago	1946 Average
Average weekly earnings in manufacturing	\$70.92	\$71.68	\$71.33	\$43.82
Employment (in millions)	x62.1	x62.1	63.1	55.2
Unemployment (in millions)	x3.3	x3.3	1.5	2.3
Wholesale prices (U. S. BLS, 1947-49 = 100)	110.4	110.0	110.9	78.7
Retail sales (seasonally adjusted, in millions)	\$14,439	\$14,044	\$14,412	\$8,541

*Preliminary, week ended Aug. 7, 1954.

†Revised.

‡Estimate.

§New series. Not comparable with previous data.

¶Date for "Latest Week" on each series on request.

in BUSINESS this WEEK . . .

GENERAL BUSINESS:

BEHIND STEEL'S URGE TO MERGE. As in textiles and autos, a reason for rumored combines is stiffer competition. p. 25

NEW MODELS: WHERE THE BATTLE IS THE HOTTEST. Changes in low- and medium-priced cars will be biggest in 20 years. p. 26

WHAT THE SEASONS COVER UP. Seasonally adjusted employment statistics might be truer economic indicator. p. 28

CLUE-HUNTING IN LOCAL POLITICS. Political leaders find the nation's pulse in primary elections. p. 29

BUSINESS ABROAD:

MENDES-FRANCE: STARTING AN ECONOMIC REVOLUTION. His proposed cures for domestic ills are drastic and long range. p. 98

HASSLE OVER JAPANESE TRADE. Cuban sugar and textile industries nearly torpedo trade pact. p. 102

NEW TWIST . . . given to German asset story by Eisenhower's latest stand p. 32

COMPANIES:

CARVING OUT AN EMPIRE IN FREIGHT. Pacific Intermountain Express soon may be the second largest trucking company in the U. S. p. 140

FINANCE:

WHAT LIES BEHIND THE HEADLINES. Here are some reasons, methods, and advantages back of the wave of mergers. p. 62

NEW NO. 1 BANK. Capital stock increases at N. Y.'s National City will make it world's largest—in one way. p. 68

BEHIND STEEL'S URGE TO MERGE. As in textiles and autos, a reason for rumored combines is stiffer competition. p. 25

INDUSTRIES:

A BASEBALL CLUB IN DISTRESS. Hopkinsville (Ky.) Hoppers are taking too many called strikes. p. 84

BUSH LEAGUE BASEBALL ON THE ROCKS. TV receives the most blame, but there are other causes for the slump p. 90

SEATTLE'S VERSION OF THE MARDI GRAS. Davy Jones and Neptune air their feud at the annual Seafair. p. 30

NEW TWIST . . . given to German asset story by Eisenhower's latest stand. p. 32

Business Briefs p. 34

SPECIAL REPORT:

PEOPLE: WHAT'S BEHIND THEIR CHOICES—IN BUYING, IN WORKING. What the methods and findings of the behavior sciences have to tell business (cover). p. 50

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TROUBLES IN AND OUT OF COURT. Competition and court decrees break over Wallace-Tiernan, largest chlorinator manufacturer. p. 95

LABOR:

AUTO WAGES: THE BRAKES ARE ON. Manufacturers try to cut wages and fringe benefits to fit their pocket. p. 112

DISSENT IN NLRB . . . over latest decisions broadens split between Democrats and Republican majority. p. 113

NO ONE UNION SETS THE PATTERN. In the electrical manufacturing industry, three major groups must be considered. p. 114

LEFTIST UNIONS . . . split victory in four recent NLRB elections with right-wing challengers. p. 117

MANAGEMENT:

HOW A TEAM TAKES OVER A ONE-MAN SHOW. It happened when Tom Braniff's death left his company without a pilot. p. 43

OUSTER IS OUSTED. Sewell L. Avery is fired—a dose of his own policies from stockholders he opposed. p. 46

MARKETING:

TARIFFS WON'T SELL WATCHES. Prices may go up some—but few in the trade will gain or lose much in the long run. p. 75

PREFABS: NEWCOMER'S FAST BREAK. A recent TV show gave Techbuilt Homes a \$2-million publicity start. p. 78

DISTRIBUTORS GET CUT OFF. Ekco Products and Philco stop shipping fair trade items to N. Y. and other price-war areas. p. 81

NEW MODELS: WHERE THE BATTLE IS THE HOTTEST. Changes in low- and medium-priced cars will be biggest in 20 years. p. 26

THE MARKETS:

THE OFF-BLUE CHIPS TAKE OVER. The Big Board's August trading shows secondary issues topping the list. p. 110

MUNITIONS:

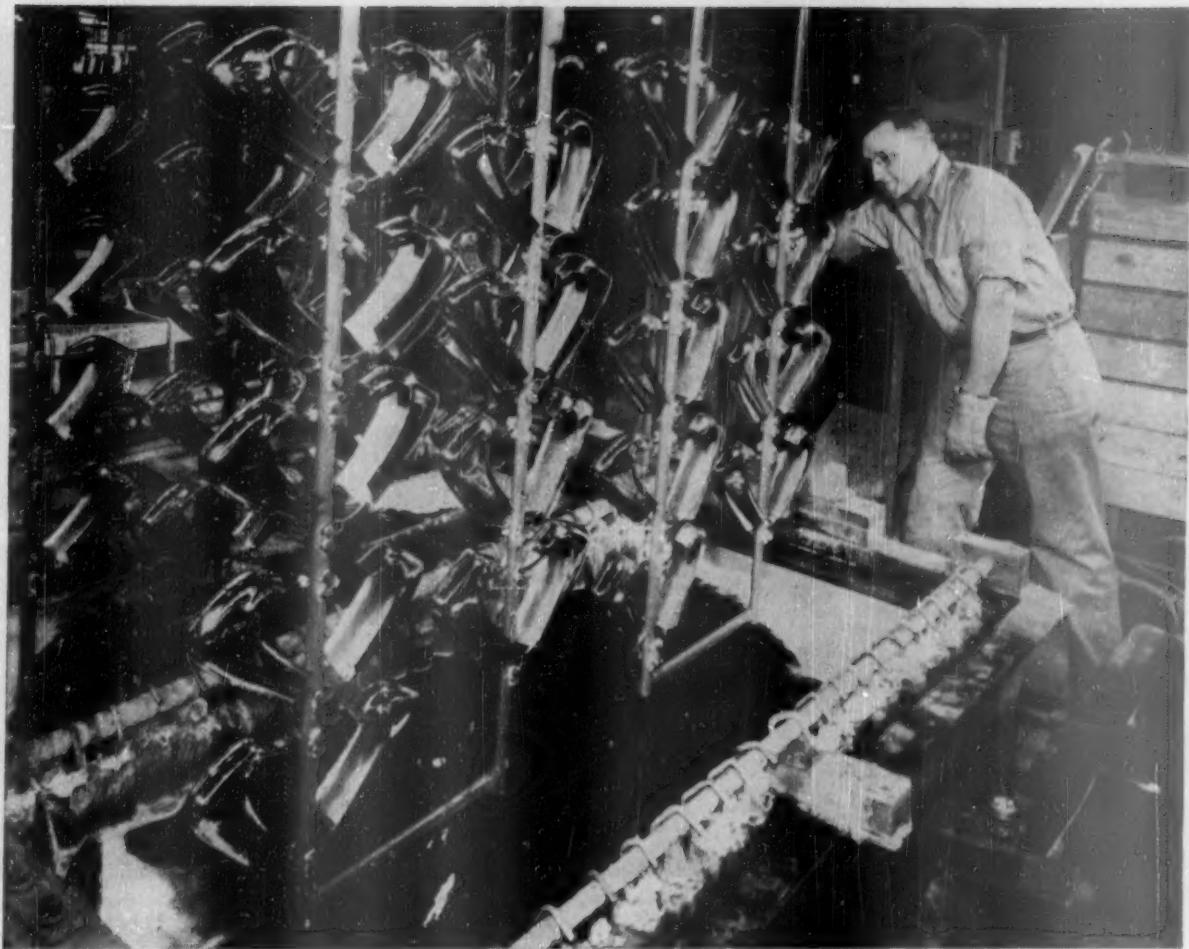
THE GAPS ARE BEING FILLED IN—FAST. The radar fence around the U. S. is nearing completion. p. 136

PRODUCTION:

ALUMINUM RACES TOWARD NEW MARKETS. The industry has to readjust to its increased supply for civilian consumption. p. 130

TECHNOLOGISTS GET A NEW MONTHLY. Control Engineering, a sister McGraw-Hill publication, covers the problems of automatic control. p. 138

NEW PRODUCTS p. 135



How chilling helps purify a plating bath

"FREON" REFRIGERANT SPEEDS RECLAMING PROCESS**

A major problem in electroplating with copper cyanide is the formation of troublesome carbonate. Before mechanical refrigeration came along, electroplaters waited for a cold day when the carbonate would form crystals and deposit on the tank bottom. The solution was discarded when the carbonate content became too high.

Today—thanks to refrigeration with "Freon" fluorinated hydrocarbon refrigerants—firms like The Electric Auto-Lite Company don't have to wait for a change in the weather. Here's the system Auto-Lite uses at their Woodstock, Illinois, plant. A batch of solution is drawn off from the plating bath and cooled down in stages, with agitation keeping the carbonate crystals in suspension. When down to 26°F., the solution is pumped into a centrifuge and the crystals are strained off. The purified solution is then returned to the bath.

This "cooling-off" process keeps plating baths out of service less than an hour, and gives far more consistent results than earlier methods. It's another example of refrigeration in shirt sleeves—bringing new economy and efficiency to industry.

Du Pont "Freon" refrigerants are ideally suited for industry's low-temperature applications. They are safe refrigerants . . . nonflammable, nonexplosive, virtually nontoxic. Careful laboratory controls assure you of a uniform, high-quality refrigerant that will add to the service life and efficiency of all types of equipment.

New and imaginative use of low temperatures has helped many manufacturers cut costs and improve finished products. Study your own firm and its operations to see where modern refrigeration and air conditioning can help.

You'll find some good ideas in our interesting booklet, "How Air Conditioning and Refrigeration Benefit Industry." Send for your free copy today to E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Division, Wilmington 98, Delaware.

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SAFE REFRIGERANTS

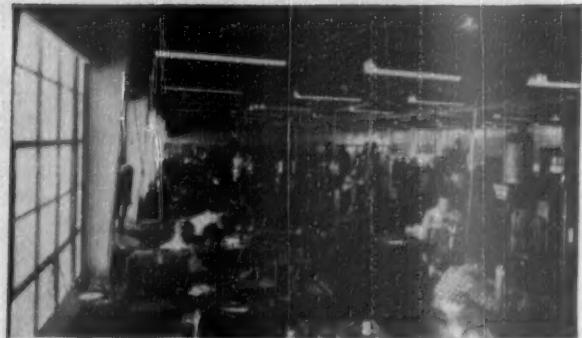
*"Freon" is Du Pont's registered trade-mark for its fluorinated hydrocarbon refrigerants.

DU PONT
REG. U. S. PAT. OFF.

**BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY**



Use of movable partitions in the clear-span Butler interiors provides flexibility to match changing needs. Insulation and aluminum roof sheets help assure year-around office comfort.



Banks of windows in the sidewalls flood the Butler buildings with natural light. Butler sheeting bolted firmly to the framework, keeps upkeep costs low . . . furnishes good fire protection.

"BUTLER buildings help speed vital expansion of *Remington Rand* research"

"Speed was important when we signed the contract for the first of our two 50' x 200' aluminum-sheeted Butler steel buildings in 1948," says S. E. Szemetko, plant engineer at Remington Rand's Laboratory of Advanced Research, Norwalk, Conn. "And having it ready for use in 10 weeks proved the value of Butler's fast delivery and quick erection!"

"We also experienced the ease and economy of using Butler steel buildings with other materials when our 4-story office building was built in 1952. By combining them with masonry construction, we obtained the needed space—even though our site area was limited. The 40' x 300' Butler building on the fourth floor, and two 20' x 300' Butler sections at each side on the third floor, give us 24,000 sq. ft.

of well-lighted, easy-to-heat, insulated office space.

"We don't know of a more economical or satisfactory way in which we could have obtained the buildings we needed. Our three Butler buildings are attractive. They provide the functional space we need for peak efficiency. Their steel-aluminum construction furnishes good fire protection . . . keeps maintenance costs low. We think that's proof that our decision to build with Butler was sound!"

See your Butler dealer! He'll help you with your building plans . . . show you Butler rigid-frame and bowstring-truss buildings—in widths, lengths, single and multiple installations—to fit your site and use. Write office nearest you for name of your dealer and more details by mail.



BUTLER MANUFACTURING COMPANY

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Manufacturers of Oil Equipment • Steel Buildings • Farm Equipment • Cleaners Equipment • Special Products
Factories located at Kansas City, Mo. • Galesburg, Ill. • Richmond, Calif. • Birmingham, Ala. • Minneapolis, Minn.

Behind Steel's Urge to Merge

- There's basis for the rumors that a series of combines could happen.
- Two of the industry's biggest have admitted that they're negotiating a merger deal.
- As in last year's rash of marriages in the auto industry, the underlying reason is: growing competition.

Why should there be so much talk of mergers now in the steel industry?

One good answer: increased competition.

It was the battle for survival that set off a cycle of mergers in the automobile and textile industries during the past year (page 62). The urge to merge got more intense as competition sharpened. With steel getting more competitive, the likelihood of a series of combines in that industry looms.

No small part of the fast-flying gossip about steel company mergers and consolidations originates in Wall Street board rooms. Speculators decide in their own minds that a particular company should be in a merger, then buy enough shares to shoot the market prices skyhigh. Last week, for example, Allegheny Ludlum Steel Corp. stock climbed 54 points in four days to 38 $\frac{1}{2}$. Rumors linked A-L with almost every bigger company except U.S. Steel Corp., the biggest of them all. And yet A-L officials stoutly deny they are interested in merging with anybody.

But even in the steel industry itself you hear considerable talk about the possibilities of mergers. There is some basis for it, too:

Bethlehem Steel Corp. has admitted it is negotiating a deal with Youngstown Sheet & Tube Co. that would link the industry's second largest and sixth largest units.

Follansbee Steel Corp. has said it is being looked at for possible purchase. Speculation last week revolved around Superior Steel Corp. and A. M. Byers Co. as possible merger partners.

There was talk, too, of hitching Republic Steel Corp., third largest in the industry, with Wheeling Steel Corp., now in 10th place. Both companies denied the rumors, however. That didn't prevent Wheeling stock from

ending with a net gain of 2 $\frac{1}{2}$ to close at 42 $\frac{1}{2}$ on Monday this week.

• **The Answer**—Up until this year, all through World War II and the hurly-burly postwar era, practically every ton of steel that could be made could be sold. Uncle Sam or the seller pretty much decided who would get steel.

Now that the mills are running at only two-thirds of capacity, the seller is out looking for customers. If he finds enough of them close to his mill, he is lucky. If he has to go far afield, he runs into trouble. The nigger in the woodpile is the present system of pricing steel f.o.b. mill.

That could easily be the main reason Bethlehem is exploring the possibility of absorbing YS&T. Bethlehem must be looking longingly at Youngstown properties in the Chicago area—where Bethlehem has never had any operating facilities.

• **Switch to F.O.B.**—Before 1948, Bethlehem normally sold in that market in competition with all other producers. But in that year there occurred one of the most important changes that ever took place in the steel business. The steel companies themselves decided that they would no longer sell steel on the old "basing point" system, but would start quoting prices f.o.b. mill and selling it that way.

Under the basing point system prices had been set for various products at various producing locations, and those prices were uniform for all producers regardless of whether they actually produced steel at those points.

In April, 1948, the U.S. Supreme Court ruled out the use of the basing point system in the cement industry. One of the companies directly affected was Universal Atlas Cement Co., which announced that it would switch to an f.o.b. mill pricing system.

• **Impact**—What made Universal Atlas' move important to the steel industry was that Universal's parent company, U.S. Steel Corp., within a month, decided to follow suit as far as its steel business was concerned. Big Steel's move was followed quickly by every other steel company.

One important effect was to create potential local monopolies. Inland Steel Co., for example, sat comfortably in the marvelously rich Chicago market. It knew that competitors from faraway parts, such as Pittsburgh, were automatically at a disadvantage because of the freight charges Chicago customers have to pay on steel coming in from outside.

Another example is Bethlehem, which has most of its mills in eastern territory. It had at least a near monopoly of Atlantic Seaboard business. Pittsburgh producers and others farther west knew that eastern customers had to pay more for their steel because of added freight. That situation was a major reason for Big Steel to build its Fairless Works.

Bethlehem's strong competitive position in the East is offset, of course, by its present inability to sell equally competitively with Midwest producers. Acquisition of YS&T would be an obvious cure, for Youngstown has 2,656,000 tons of capacity at East Chicago.

Aside from bettering its competitive position, Bethlehem and any others of like mind stand to gain in other ways.

One is that—at today's prices—it is cheaper to buy facilities than to build them. New steel capacity today would cost at least \$250 a ton. Last spring the market valued the steelmaking capacity of the 10 largest producers at \$53 a ton.

Another merger benefit is rounding out a line of finished products. Acquisition of YS&T would put Bethlehem into the oil country goods business.

A fourth possible gain is rounding out raw materials supplies and resources. Back in 1930, Bethlehem attempted to pick up YS&T but was blocked by Cyrus Eaton. One of the estimated benefits of that time was an improvement in Bethlehem's iron ore resources.

A fifth possible benefit for smaller producers is building up enough volume to carry the overhead. This would duplicate somewhat the reasons for the mergers of the auto independents.

	CHEVROLET	FORD	BUICK	PLYMOUTH	OLDSMOBILE	PONTIAC
Cars Sold: Jan.-June, 1954 (est.)	693,428	690,904	257,000	213,000	192,057	182,630
Gain or Loss from Jan.-June, 1953 (%)	+ 3.5	+ 45.0	+ 8.5	- 29.5	+ 14.0	- 10.0
1955 MODELS	Body	New design Wrap-around windshield	New design Wrap-around windshield A new luxury model, "Fairlane"	Face-lift: new trim and grill	New design Wrap-around windshield	Face-lift: new trim and grill
Engine Type Est. Horsepower	New V-8 - 150	V-8 160	V-8 170-200+	New V-8 145	V-8 175-190	Two new V- 135; 150
New Features	Tubeless tires New front-end/ suspension	Tubeless tires	Tubeless tires (possible) Possible improved transmission	Tubeless tires (possible) Power brakes (possible)	Tubeless tires (possible)	Tubeless tire Full-flow oil filter

New Models: Where the Battle

In the chart above, you can read the specifications for the auto industry's most extensive—and expensive—changes over in 20 years. The chart focuses on the hottest area of competition: the low and medium price classes.

This week, some auto plants are already closed for retooling, and nearly all will start making the switch to 1955 models within the next two months. Some 1955 models may even make their public debut within that time. Sales departments are champing to launch a new race in the showrooms.

Throughout the industry, but particularly in the low and medium price ranges, more completely new bodies and engines will be introduced than in any year since the mid-30s. You can't yet get an estimate of what all this is costing the industry, but it will easily run to \$1-billion—and probably a lot more.

• **Big Stakes**—The expenditure is large, but so are the stakes. For some of the key companies in one of the nation's largest industries, the 1955 models could be a last-ditch stand.

Chrysler Corp., for one, has to count on its 1955 line to retain its designation as one of the "Big Three" along with General Motors and Ford. Packard, with a \$2-million first-half loss and more red ink to come, banks on its new model to restore a profit.

• **Crucial Chrysler**—Chrysler is the center of the industry's interest in new models. Sales figures in the table above show why. The two bread-winners of the line—Plymouth and Dodge—have taken a terrific pasting from General Motors and Ford.

To recoup, Chrysler is bringing out all-new bodies on Plymouth, Dodge, De Soto, Chrysler, and Imperial (establishing the latter as a distinct line), and new engines in the Plymouth and Chrysler Windsor. This is no automatic guarantee of success. Again, the table shows why: The competition is doing the same thing.

• **First to the Punch**—General Motors in 1954 gave new body styles to Buick, Oldsmobile, and Cadillac. All caught the public's fancy, and Buick and Olds were pushed up among the fastest sellers. For insurance, GM held back on changes in its bread-and-butter cars, Chevrolet and Pontiac.

Now Chevrolet and Pontiac, too, are being changed. That's what Chrysler has to beat. And it has its entire line wrapped up in the battle.

• **Easy Does It**—The drastic changes in the full line mean that Chrysler plants will be down for changeover on staggered schedules through most of this month and next. Tooling has to be installed and production methods made foolproof before Chrysler dares release its cars to the public.

Like other companies, Chrysler remembers the 1952 case of Studebaker, which built up strong public demand for its radically revised models, then tripped up on production. By the time the production situation was cleared up, a lot of the new orders had evaporated. That's why all manufacturers with greatly changed cars are taking longer changeover periods than they have since the war.

Another factor in this, of course, is

that with the return to a tighter market there is no urgency to make a fast changeover. This year the down-time for model changes will run up to six weeks. In recent years some plants changed over to completely new styles in as little as 10 days.

• **Early Start**—There is another great difference from postwar days in this year's changeovers: New models will come out earlier. The sales figures show the general reason, but the details vary from company to company. Chevrolet, for instance, is still Number One in sales, but its new line is expected to be introduced possibly as early as October. It hasn't kept its margin of superiority over Ford, but with a new body and a new engine it hopes to jump to a fast lead over Ford, which probably won't be out till November.

The Chrysler lines obviously have reason to be out as early as possible because the present models aren't going anywhere. Published reports have put Chrysler's introduction dates in October and November.

On the other hand, Nash and Hudson—with greater sales losses than any line except Kaiser-Willys—probably can't bow with 1955 models until very late; they're still trying to integrate the two lines under the new American Motors Corp.

• **Selling Points**—When the cars are finally in the showrooms, you will find the familiar three themes dominating the sales talk: style, V-8 engines, and higher horsepower.

In style, the emphasis still is on longer-and-lower—and more glass area.

MERCURY	DODGE	STUDEBAKER	NASH	HUDSON
151,683	81,000	52,068	46,116	14,416
+ 25.0	- 49.5	- 38.0	- 47.0	- 57.0
New design Wrap-around windshield "Monterey" model longer, lower luxury car	New design Wrap-around windshield	Face-lift: new trim and grill	Extensive changes but falling short of all-new shell	Extensive face-lift
V-8 200	V-8 175	V-8 140	New V-8 possible 175	New V-8 possible 175
Tubeless tires	Tubeless tires (possible)	"Champion" to have V-8 engine	Possible new front-end suspension	

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Is the Hottest

With a few exceptions, the wrap-around windshield pioneered in 1954 by GM will appear on all cars in various new shapes. All-new bodies will appear on at least 10 models.

Seven 1955 models will use V-8 engines for the first time, and six of the engines are brand-new. Chances are, only Kaiser-Willys will be without a V-8. Increasing use of V-8s accentuates the trend to higher compression ratios and higher horsepower. Even the "low-priced" cars in 1955 may carry up to 160 hp., and the top rating for the larger cars is likely to be around 260 hp.

In addition to new bodies and new engines, nearly all the 1955 cars will furnish tubeless tires as standard equipment, and new or improved mechanical features will be spotted throughout the models.

There will be a reshuffling of the makes of transmissions used in some lines, and an all-new transmission will appear on the Lincoln. Packard will have a new version of its Ultramatic. In general, the trend in transmissions is toward the torque converter type familiar on Buick, Chrysler, and Packard, and away from the gears with fluid coupling used in GM's Hydra-Matic.

• **Differences**—In the Hydra-Matic transmission, the gears shift mechanically, with the fluid coupling acting as a clutch; in the torque converter, turbines replace the gears in regulating the power applied to the shaft.

Engineers favor torque converters for smoother acceleration and promise of eventual greater efficiency. But in the "drive" range, their lack of me-

chanical gears makes them sluggish from a standing start, and there's no holding back by the engine in slowing down. Packard's Ultramatic change is believed to be the use of gears for starting in "drive" range.

• **The Lineup**—Those are the broad trends for 1955. The company-by-company picture shapes up somewhat like this:

I. General Motors

Chevrolet—A V-8 engine of approximately 150 hp. is set into a "V" in the front axle, with the point of the "V" only about 8 in. off the ground. This means the entire car can have a low silhouette, with an over-all effect closer to the current Oldsmobile. The placement of the engine makes it possible to have nearly a straight line across the top of fenders and hood. Chevrolet has come up with an adaptation of the basic GM wrap-around windshield that, because of the corner post design, still looks new and different.

The division will keep its 6-cyl. in-line engine so it, like Ford, can offer customers a choice of a six or eight.

This means, too, that Chevrolet has to have two frames, the existing one for the six, and a new one for the V-8. Chevrolet also will have a new front-end suspension, reportedly of the same type as Ford's present ball-joint suspension.

Pontiac—This division is going all the way with a switch to V-8 engines, reportedly having two new ones ready. One, to replace the present 6-cyl. en-

gine, will develop about 135 hp., and the other will be around 150 hp. Body changes here will also include the wrap-around windshield. Standard equipment will include tubeless tires and—removing a point of long criticism—a full-flow oil filter, which most other cars have had for years.

Buick—Body changes here will be mostly what the trade terms "face-lift," meaning new trim, new grillwork, refinements here and there. A horsepower boost to about 200 for the Roadmaster and Century is probable, with the Special's horsepower, now 150, moving up to about 170.

Oldsmobile—Only minor car body changes are seen likely. Horsepower probably will move up to just under 200 for the 98 series.

Cadillac—Reportedly, the long rear deck of the Cadillac will be shortened, but other body changes will be slight. Horsepower, now 230, will move up to at least 250 to meet competition.

II. Chrysler

Plymouth—Like Chevrolet and Ford, Plymouth will offer a choice of two engines, a six and a new V-8 developing about 145 hp.

The body will be so much longer and lower than people have been accustomed to seeing on a Plymouth that it is likely to appear much more radical than it really is. A wrap-around windshield will be noticeably different from that used by GM cars. The corner posts will slant back from bottom to top, and the glass will curve in much more of a true arc than that of GM.

Dodge and De Soto—Both will have all-new body shells featuring the Chrysler version of the wrap-around windshield. Horsepower will go up to about 175 in the Dodge, to about 195 in the De Soto.

Chrysler—In addition to the sweeping body changes that will feature all Chrysler Corp. cars, there are some special developments in the Chrysler Div. line. The Windsor—which has been a 6-cyl. car in the medium-price bracket—will switch to a V-8 engine, and the Imperial—the corporation's highest-priced model—will be established as a separate line. A separate identity for the Imperial has been a Chrysler goal for the past two years, but in 1955 even more efforts will be made in this direction. Horsepower in both the New Yorker DeLuxe and the Imperial is expected to be shovved up from 235 to about 260.

III. Ford

Ford—This may be the year when the break with GM styling will be sharply noticeable. Longer, lower lines will borrow many features of the Ford

EMPLOYMENT

Thunderbird sport car. Hooded headlights may be one example, and the rear-end treatment another. A wrap-around windshield, which also is on the Thunderbird, will be used. There may be a special luxury model with lavish use of chrome stripping and a plastic roof over the front seat, such as appeared in 1954 on a hardtop model. Horsepower is expected to go up to about 160.

Lincoln-Mercury—This division is bringing out a new body style for the Mercury, wrap-around windshield and all, but it's going along with the Lincoln pretty much as it is for another year. Horsepower will be stepped up in both cars, Mercury to 200 and Lincoln probably to at least 250. Mercury is establishing its Monterey luxury line as a distinct car with longer, lower lines. Lincoln will have a new automatic transmission, similar to the Ford-Mercury torque converter, to replace the Hydra-Matic.

IV. Little Three

Packard—This car will be all new: new body, new engine, new transmission. Front fender treatment will be distinctive, and there will be a wrap-around windshield. Packard will have two new V-8 engines: a small one for the Clipper with 175-180 hp., and a larger one for the Patrician and Cavalier with around 260 hp.

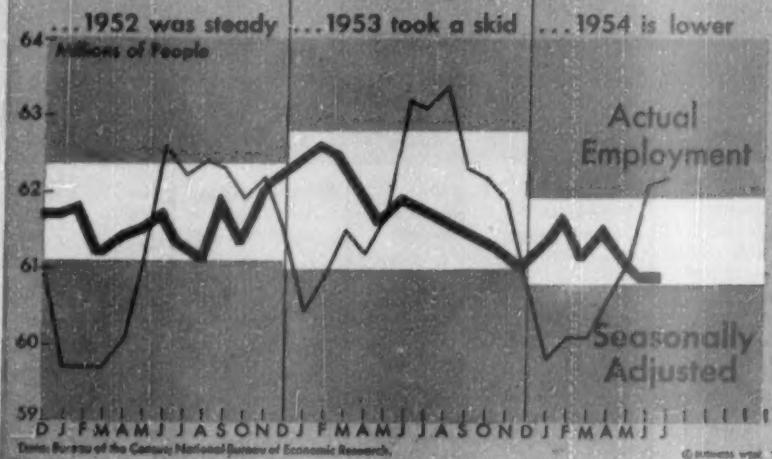
Studebaker—This may be the first of the 1955 models to be shown publicly. It will be changed very little from current design. No integration of Packard engines or transmissions is expected, since the combination of the two companies will come too late. Greatest change expected out of South Bend is use of a V-8 engine in the low-priced Champion.

American Motors—Still struggling to combine the Hudson and Nash lines, AMC is not expected to bring out its new cars until after the first of the year. Hudson likely will be little changed. But it, as well as Nash, reportedly will buy V-8 engines and transmissions from Packard. Nash will not have an all-new body shell, but some major changes in body design are looked for.

Kaiser-Willys—Any body changes here will be merely face-lifting, but there may be a new front-end suspension. Engines are likely to remain the same. Introduction probably will be late in the year as K-W still has a sizable stock of 1954 cars to clean up.

There is still a chance that before production begins on a 1955 line, Kaiser will decide to drop out of the passenger car business. But as recently as last week, Edgar Kaiser denied that such a decision had been made. Talks with Chrysler officials, he said, had concerned disposal of some of K-W surplus plants, and not sale of the auto business.

- The actual figures swing widely
- Trim off seasonal extremes, and you find...



What the Seasons Cover Up

New series of employment statistics nullifies the distorting effects of winter slumps and summer pickups. The result, many think, is a truer economic indicator.

This chart shows that you can't accurately assess the nation's economic health by looking at raw figures on employment. Seasonal factors distort the picture powerfully—sometimes even turn it upside-down.

The frantic black line in the chart represents the raw figures—the actual numbers of people employed through the past two and one-half years. These are the figures issued monthly by the Bureau of the Census. The other, much calmer line represents seasonally adjusted figures just worked out by the National Bureau of Economic Research.

• **Calm Line**—The difference between the National Bureau's figures and the raw figures came out sharply this week. The Census Bureau reported employment for July at 62,150,000, up some 50,000 from June. But the National Bureau took out the seasonal factors, and on its books employment shows as holding steady from June to July.

The research group's figures also show that the 1953-54 recession had less impact on employment than the casual observer might have thought.

Last August, the Census Bureau's unadjusted figures showed that a record 63.4-million people were at work. By January, only 59.8-million were employed—a drop of slightly over 34-million.

The drop looked alarmingly big to many, but the National Bureau's figures almost make light of it. August is traditionally a peak employment month, says the research group; hence, in a sea-

sonally adjusted series, August's peak must be chopped off. Conversely, January is usually a month of low employment; its valley must be filled in to get rid of seasonal factors. That done, the National Bureau comes up with an August-January drop of not 3½-million, but 400,000.

The upswing in actual employment since January is also largely a seasonal phenomenon, the National Bureau says.

By the same token, unemployment looks a little less worrisome if you allow for seasonal factors. In June, about 3½-million people were looking for jobs—a scant 45,000 more than in May-July. This was a considerably smaller rise than you usually find in the May-June period when students and other part-time workers are entering the labor force. The National Bureau's conversion of this smaller-than-average rise in the raw unemployment figures to seasonally adjusted estimates show unemployment down 500,000 from May.

• **Meaning**—The National Bureau thinks its adjusted employment series is more useful to economic analysts than are the Census Bureau's raw figures. Apparently many men in the federal government agree. Several federal agencies are working on seasonally adjusted employment figures of their own.

It's probable that Dr. Arthur F. Burns, chairman of the President's Council of Economic Advisers, is sparking some of these projects. Last month, Burns told congressmen of the need for adjusted job statistics.

Clue-Hunting in Local Politics

● It's a nervous habit of political leaders faced by a looming national election. Local goings-on help outline trends, provide clues on which to build strategy.

● In the South, the watchful leaders find, Democrats are putting more importance on party loyalty.

● In California, Sen. Knowland has improved his chances of a nomination for President in 1956.

With a national election date drawing near, politicians are keeping a nervous watch over goings-on at the local level. They watch primary elections, county conventions, fights for mayors' and governors' chairs. They hope to gain some insight into the national political mood.

Looking around them this week, they found much to think about.

• **The South**—Things are happening in the South. Out of the complex and fluid mix of public opinion, a trend is beginning to emerge. It has not yet gained the ponderous kind of momentum that swung Southern votes to Dwight Eisenhower in 1952, and you can find many observers who say it never will. But it is a definite movement nonetheless. It could loom large at the polls this November and in the Presidential elections of 1956.

Simply put, the trend is this: Southern Democrats are returning to what some analysts call "regularity." They are putting more stock in party loyalty. They are voting for Democrats who have not, in the past, bolted party lines.

This might dampen the Republican hope of breaking up the solidly Democratic structure of Southern politics (BW—May 29 '54, p99). Independent-minded Southern Democrats have often strayed away from their party in such groups as the Hoovercrats, Democrats for Willkie, and Citizens for Eisenhower. It is on such independence of mind that the Republicans have been counting for future gains. But if Southern Democrats now decide to raise party loyalty to new importance, Republican plans may have to be refigured.

• **Example**—A primary election in Texas indicates the presence of this new Democratic mood. Gov. Allan Shivers, seeking the Democratic nomination for a third term, ran against Ralph Yarborough, an attorney whom Shivers had defeated handily in the same race in 1952. Much to the surprise of many Texans, Shivers failed to win the required 50.1% of the votes. A runoff primary is scheduled for Aug. 28.

Many observers think Shivers' poor

showing against Yarborough is a result of the governor's having supported President Eisenhower in the 1952 election. A large percentage of the Texas voters, these observers feel, have become reluctant to support a man who once strayed from the party. They prefer to give their votes to a man like Yarborough, who remained a steadfast Democrat in 1952.

• **Argument**—There are other analysts, however, who feel this theory exaggerates the importance of the "Loyalist" movement (as Texans call it). It's possible, this school admits, that many Texas Democrats have repudiated Shivers because of his record in 1952. But that doesn't make these Democrats true loyalists. They may have turned their backs on Shivers because of a feeling that he is politically untrustworthy. But they may still reserve for themselves the right to vote as they please—Democratic, Republican, or otherwise.

Besides, these analysts continue, there are many purely local factors working against Shivers. For one thing, he is after a third term—something unprecedented in Texas history. For another, he has lost a good deal of support from Texas farmers. His work on water and soil conservation has been less extensive than the farmers had hoped for; and many farmers feel he should have done more than he did to help them battle drought.

Furthermore, Shivers' administration has had some bad luck with scandal talk in recent months. One scandal involved insurance laws and companies; the other, a real estate deal. Hints and rumors linking these things with the state capital have lost Shivers some friends among the voters.

Then there are the labor and Negro votes. Shivers has not made friends with organized labor during his administration. And he has lost the support of Negroes through favoring segregation in schools. Shortly before the primary, Yarborough declared himself of the same mind. But observers feel the Negroes' quarrel with Shivers, being of longer duration, goes deeper. One Negro

leader says: "When you have a choice between a Shivers and a Yarborough, you have to back a Yarborough."

All this makes many analysts think that the loyalist movement played only a small part in Shivers' trouble at the primary election. But the other school of thought insists: The loyalist trend has hurt Shivers, and may yet defeat him at the Aug. 28 runoff.

• **Tennessee**—Another primary, in Tennessee, has suggestions of the same forces at work. Liberal Sen. Estes Kefauver has easily turned back the challenge of conservative Rep. Pat Sutton in a race for the Democratic nomination as Senate candidate.

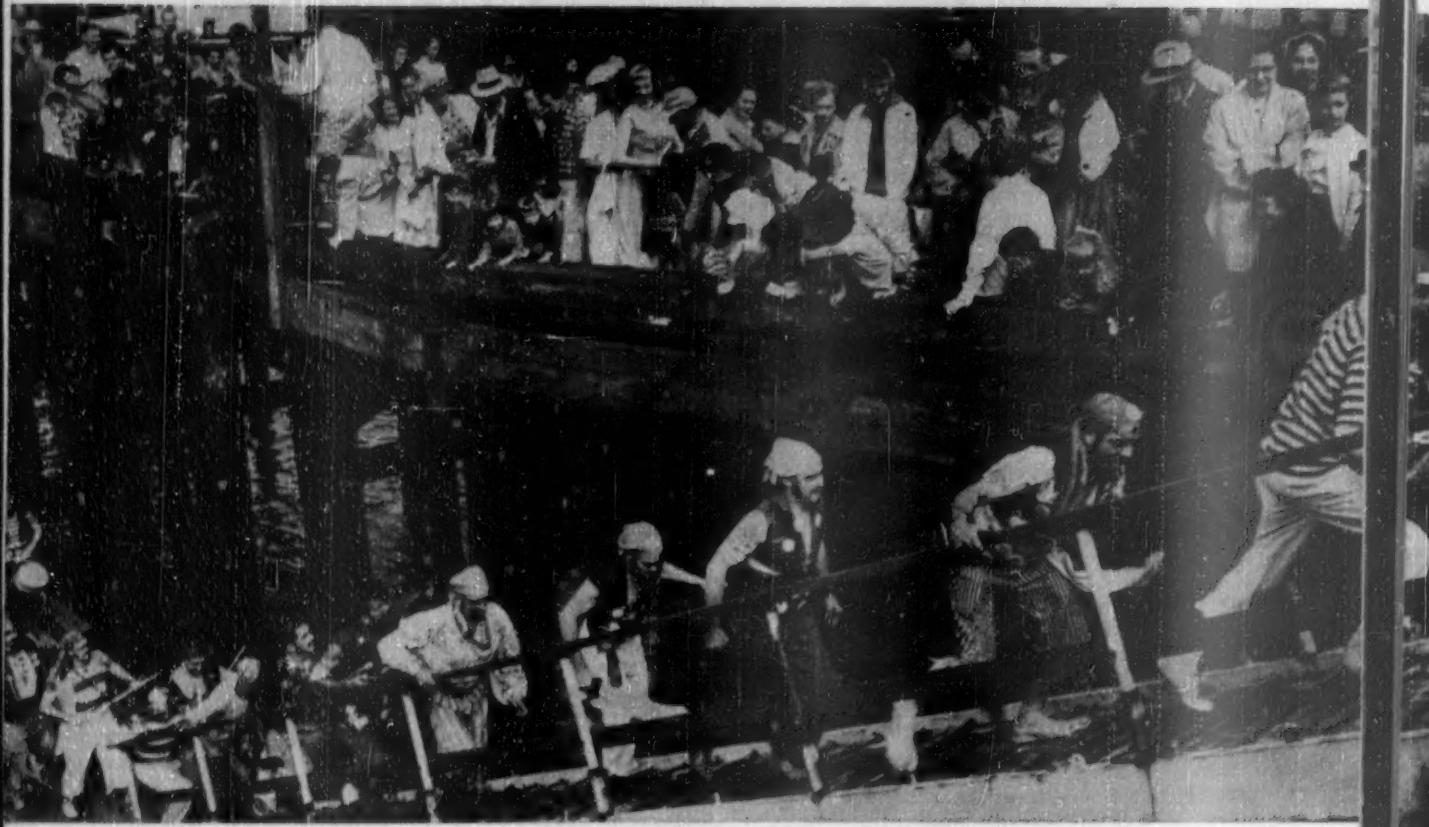
Kefauver's tag as liberal puts him alongside Yarborough and the Texas loyalists (who are not all liberals). Generally speaking, conservative Southern Democrats were the ones who voted for Eisenhower in 1952. Liberals, by and large, stuck by Adlai Stevenson. Kefauver's clear-cut victory indicates that the liberal (and loyal) Democrats have a good deal of power.

In Arkansas, another liberal candidate beat a man who had been veering toward conservative ranks. Newspaper publisher Orvil Faubus, a liberal, nosed out Gov. Francis Cherry in a runoff primary. In this election, as in the one in Texas, local issues played a big part. But liberal and loyalist thinking was in the air, too.

• **California**—Republican primaries, by and large, have not caused so much speculation as the Democratic ones. But another kind of political fight, involving Republicans in California, promises to have a lot of impact on the 1956 elections.

The fight involved selection of a vice-chairman for the Republican State Central Committee. By tradition, the vice-chairman moves up to become chairman after two years. This means that the man selected as vice-chairman this year will be chairman in 1956—politically, the big year. As chairman, he will have a heavy influence over the committee, which in turn will play a big part in naming California's choice as Republican nominee for President.

California's two favorite choices for President right now are Vice-Pres. Richard Nixon and Sen. William Knowland, the Senate majority leader. Each of these men had his own idea on who should be the state committee's vice-chairman. With help from Gov. Goodwin J. Knight, Knowland's man won. The man is Howard Ahmanson, Los Angeles business executive. As head of the committee in 1956, Ahmanson will be in good position to boost Knowland as California's Presidential choice.



INVASION

Pirates swarm ashore to take part in Seattle's Seafair, yearly festival designed to promote the city as a place to live, visit, and do business in. The pirates' assignment: sheer, unadulterated horseplay.



INITIATION

M. M. Chism, retired businessman who played host to the cutthroats one night, is sworn in as an Honorary Pirate.

Seattle's

Nobody is quite sure why King Neptune and Davy Jones hate each other. Some say it's because of a dispute over real estate holdings under the sea. But whatever the cause, the effect is the same every year: When old Neptune emerges wearily from the sea to take his 10-day summer vacation in Seattle, Davy Jones invariably barges in and turns the city upside down.

These pictures, taken last week, show what it's like to be in Seattle at such a time. The pirates belong to Captain Kidd, who has retired from active business but who maintains a crew of able men to aid in such causes as this. The cutthroats, in Jones's service, landed on the city's waterfront July 30. They jovially beheaded Seattle's mayor and chief of police. They skulked through the streets, molesting innocent women. With honeyed words on the tax advantages of piracy, they converted honest businessmen to their wicked ways.

• **Armistice**—Seattle refers to these barbaric goings-on as the Seafair. Its beginnings go back to 1949.

In that year, George E. Gunn, Jr.,



EXECUTION Evilly intent on taking Seattle over. Captain Kidd starts logically—by beheading Police Chief James Lawrence.

Version of the Mardi Gras

retired industrialist, was asked to head a committee to arrange a giant celebration for 1952-100th anniversary of the city's founding. Gunn hesitated. For various reasons, he didn't think a one-shot celebration was a good idea. Neither did Walter Van Camp, an expert at running city festivals whose services Gunn hoped to get. Both men felt Seattle would do better to run an annual event such as the New Orleans Mardi Gras. Thus, the Seafair was born.

The Seafair's administration centers in Greater Seattle, Inc., an organization set up in 1950 with Van Camp as managing director. Greater Seattle works all year round, but the key event on its calendar is the Seafair.

• **Water**—The object of the Seafair is to promote Seattle as a place in which to live, do business, or spend a vacation. Seattle's outstanding attraction is water—salt and fresh, for swimming, boating, fishing. The Seafair, consequently, puts the accent on water.

It consists of many things. There are fireworks, dancing in the streets, a show called the Aqua Follies, parades, boat

races. And there are personalities of the sea—Neptune, Jones, Kidd, and the pirates. These are local citizens—many of them businessmen. During the Seafair, the pirates roam the streets and kiss female bystanders aged six months and up.

All this is great fun, but behind the scenes some hard financial figuring has to be done. The Seafair keeps going by selling memberships to companies; by selling individual memberships, which are something like season tickets to the various Seafair events; and by collecting a cut from the lucrative Aqua Follies show. The Seafair budget this year was about \$295,000.

The benefits of all this are intangible. Some of the Greater Seattle men think some 1-million people, bearing \$12-million in spending money, are drawn into the city during the 10-day period. But as they see it, the Seafair's biggest contributions are in giving the city (1) nationwide publicity, which should draw in new citizens and new businesses; and (2) a personality, which will probably draw tourists.



DIVERSION Even Seattle's fair succumb—some of them more willingly than others.

New Twist...

... in German asset story comes with Eisenhower stand; it clears mixup, means no action this year.

The characters in the drama that had a surprise twist this week include two opposing groups of powerful U.S. senators, representatives of foreign business combines, a group of American bankers in the wings, a half dozen top government officials, indignant spokesmen for American business and labor interests.

The plot centers around who's going to get the \$500-million in enemy assets seized by the U.S. government during the war—and whether the American or German taxpayer will foot the bill on the German share, the major part of the total.

The action turns around the Dirksen Bill, already approved by the Senate Judiciary Committee, to return enemy assets in cash or in kind to their original owners.

The Administration played a Hamlet-like role during the hearings, with Secy. of State Dulles favoring the bill, and the Budget Bureau remaining neutral as long as it didn't cost any money—which it would.

• **New Role**—But this week Pres. Eisenhower took the center of the stage with a firm declaration of the Administration's position. In a letter to West German Chancellor Konrad Adenauer, the President made the following points:

- The Administration does not approve of the legislation now before Congress.
- He personally sympathizes with many Germans whose modest possessions were taken over during the war.
- He also sympathizes with Americans who suffered war injury or loss, and under current law are compensated out of the proceeds of ex-enemy assets.
- He hopes to find an equitable formula for satisfying both groups of claimants.

So the Administration is against giving back corporate assets, copyrights, and patents that account for some 90% of the value of the seized property. It favors in principle returning small insurance policies, trust funds, bank balances, and trunks of old clothes and bric-a-brac seized from individual enemy nationals.

The Dirksen Bill would turn back the whole kit and caboodle—or the cash the government received from sales or assets, less a handling charge. The kit includes some 8,000 patents with more than two years still to run; thousands of copyrights; the giant General Aniline

& Film Corp. (estimated value over \$100-million). Returning the \$200-million proceeds of sales of assets would require appropriations, and money from U.S. taxpayers.

• **Explaining**—The President's declaration didn't explain the previous confusion in the Administration—to which he had contributed at a March press conference by seeming to support whole-hog restitution.

The story seems to be this. Adenauer began pressuring Dulles to return the assets when he visited Washington last year.

Dulles wanted to strengthen Adenauer politically; and he thought it contradictory to give U.S. billions to strengthen Germany against Communism, while taking a few hundred millions from private German citizens.

So when Dulles was asked to speak up for the Dirksen Bill, he did (BW—Jul. 17 '54, p34). Yet he didn't endorse its details, even suggested a \$10,000 limit on returns to any one person.

• **Shift**—Still it is clear that the Eisenhower declaration represents a toughening of the Administration's position. Several factors caused the shift.

• Justice Dept.'s opposition firmed up. Justice maintained the seizures were justifiable in lieu of cash reparations—that plants and patents of General Aniline were of potential military value—other patents the same.

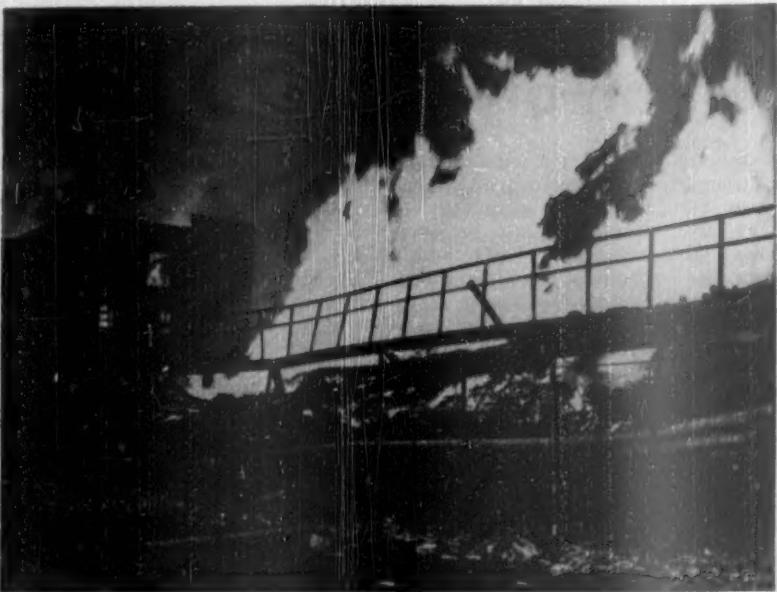
• Congressmen's mailbags began to bulge with grass-roots protests. Francis C. Brown, president of Schering Corp. (seized, but sold in 1952 to U.S. investors), asked his 15,000 stockholders to write; over 2,000 have so far. Brown charged the Dirksen Bill would give a windfall to former German owners because the seized companies have increased more than \$200-million in value since seizure.

• Several U.S. allies, notably Holland and Belgium, protested that confiscation had been agreed on by 18 countries.

Add to this a strange coincidence. Adenauer's letter to the President last month urging haste in return of assets would normally have gone to friendly Secy. Dulles. By mistake or design it got to the increasingly hostile Budget Bureau, which sent it to both Dulles and Atty. Gen. Brownell. Brownell lost no time getting to the President with his objections.

• **Deferred**—The Eisenhower stand kills any lingering chance of Congressional action this year—but the battle is sure to be resumed next session.

Some of the boldest and most expensive lobbying of the current session has been lavished on this apparently minor bill. Veteran Capitol Hill observers estimate that close to \$300,000 has been spent in travel, entertainment, and publicity.



When Lightning Hit a Distillery

Flames sweeping through American Distilling Co.'s Pekin (Ill.) plant early last week cost the company 90,000 bbl. of distilled spirits and other damage estimated at \$7.5-million, plus a \$47.2-million tax loss to the government. The

two-day fire, touched off by lightning, eventually destroyed four of the plant's 15 buildings, killed four persons. Company officials ventured no opinion on how the liquor losses were going to be made up.



will it help or hurt you?

If you are a steel user with scrap to dispose of, you might wonder if you'll be affected as the trading in scrap futures starts on the Chicago Mercantile Exchange. The Exchange believes that "hedging"—(the trading of cash and future sales simultaneously to reduce loss in a down market) will justify trading of scrap as a listed commodity. Some degree of price stabilization may also result. But to every steel user, scrap represents a loss. *Whatever* the price of salvage, it will only be a small percentage of the price of good steel.

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BUSINESS BRIEFS

Hotels, again: Sheraton Hotel Corp. bought the 500-room Blackstone Hotel in Chicago, its second big deal this month. Earlier it had bought the Ten Eyck Hotel, Albany, from J. Meyer Schine.

Cutrate color: RCA halves its price for a color TV set with a 15-in. tube (equivalent of about 12½-in. screen). The original \$1,000 tag was changed to \$495. RCA has made about 5,000 sets with the 15-in. tube, has a 21-in. tube coming out this fall. . . . Emerson is selling a color set, also 15-in. tube, at \$695. It dropped its plan of leasing color sets.

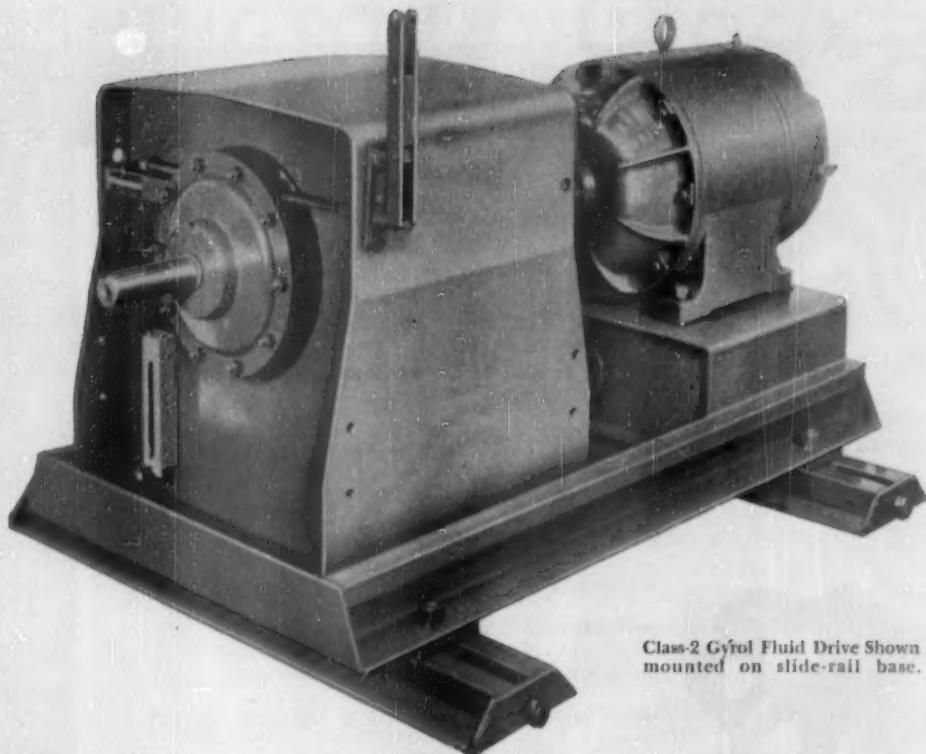
Jet transports are being developed with the help of U. S. government money. That's how you can read the Air Force order for three Boeing 707 prototypes and 11 from the production line. The Air Force will use the four-engined planes as tankers for in-the-air refueling of jet warplanes, but the order also helps to bring unit prices within the means of commercial airlines.

Railroads gain and truckers lose in the latest ICC action on piggyback hauling of truck trailers on flatcars (BW-Jun. 26 '54, p62). The agency's first code of rules upholds a railroad's right to offer door-to-door service by piggyback without falling under terms of the Motor Carrier Act. Truckers are expected to appeal.

Philadelphia made a big fuss over arrival of the first iron ore from the Quebec-Labrador fields (BW-Jul. 31 '54, p78) at the port's new \$10-million ore pier. . . . The first ore from the same mines to reach a Great Lakes port was unloaded at Buffalo this week.

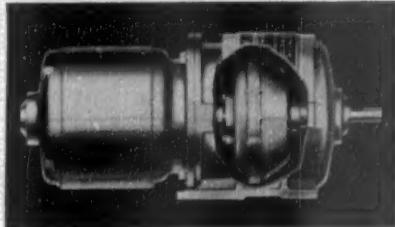
Chrysler Corp. will splash into color TV on Sept. 30 with a weekly program over CBS reported to be the most expensive in TV. Once a month it will be a big-name variety and musical spectacular; three times a month, a big-name dramatic show. All will be live pickups from Hollywood.

Cross-migration: Wilson & Co., sporting goods manufacturer, closed its Schenectady (N.Y.) plant and shifted its baseball manufacture to Tullahoma, Tenn. The company said the market for baseballs in the minor leagues is shrinking (page 84). . . . A. G. Spalding & Bros. shut down its Easley (S.C.) baseball finishing plant after nine months of operation. It shifted operations back to Chicopee, Mass., to take advantage of experienced labor.



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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
AUG. 14, 1954



It's the end of Congress—time to take a reading. Adjournment is expected by Aug. 21, though the Senate will stay on to investigate McCarthy.

Eisenhower got a lot of the legislation he asked in January. The House and Senate stood with him on foreign aid, housing, highways, farm, social security, and his own new so-called "partnership" approach to public works. They've turned him down on labor legislation, made him backtrack on trade policy, delayed on some other programs, but have given him more than the half-a-loaf you hear about.

—•—
No. 1 fact of two years of Republican rule: no depression as predicted by the Democrats.
—•—

Washington experts see an even period for a spell. And that makes for politics—issues that will crop up as the campaign for control of Congress in November gets going strong. The President is going to figure large in the campaign; so he is letting himself in for appraisal as he supports Meek in Illinois, Cordon in Oregon, Kuchel in California, etc. Eisenhower already is facing severe tests—in Texas, for example, where a bolting Democrat, Gov. Allan Shivers, is running for his political life against a "loyal" Democrat, Ralph Yarborough, in the Aug. 28 election.

A new epithet is cropping up—it's the word "stagnation." And Democrats will be echoing it as the political races get hotter. The charge that Eisenhower isn't providing new capacity and new jobs fast enough is being trumpeted by Democrats as a substitute for the charges they made early in the year that a depression was just around the corner. You'll be hearing "stagnation" more and more once the Congressional races get hot.

How much or how little business expands is the issue. You might think that's a pretty thin line, interesting only to the statisticians. But it's being taken seriously by Administration people. There are good reasons.

This week the AFL said the Administration was "drifting," economically. That's another word for "stagnation." The union is attacking the Administration for failure to produce an upturn, more jobs, more prosperity.

A report by Leon H. Keyserling, ex-President Truman's chief economist now hired by the CIO, put economic theorizing behind the "stagnation" theme. Keyserling's economics (which will be sold in Detroit, Akron, and Fort Worth) sets up a gross national product goal of \$500-billion in 1960. This compares with \$356-billion at present and estimates by Eisenhower's chief economist, Arthur F. Burns, of \$440-billion by 1960. So the critics of Eisenhower argue that the Administration falls far short of the business expansion that will be needed to keep full employment. The result: "stagnation."

Administration people admit they're in for some heavy shooting. They can't expect the next tax law, designed to stimulate expansion, to take hold overnight, certainly not before Nov. 2—election day. They acknowledge, too, that the "nudge" publicized by Secy. of Commerce Weeks is more psychological than real—that is, plans to spend and put out orders in the first quarter of fiscal 1955 won't show up in paychecks at the same time.

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
AUG. 14, 1954

Defense spending, based on Congressional appropriations and Administration plans, will show another sharp drop in fiscal 1955. Last year actual spending fell \$2.5-billion below estimates. The drop may be as large this year, despite a current round of healthy contract letting.

A total of around \$36-billion defense spending is in store, as against the budget's estimate last January of \$37.6-billion. That's big—the biggest prop government has under business, and the drop-off of almost a couple of billion in actual outlay is therefore significant. Increases in highways, airports, and shipbuilding, hailed as part of the "nudge," fall pretty short of making up the difference.

—•—
Keep under your ceiling is the order from Eisenhower's Budget Bureau to all agencies. And the fiscal 1956 budget now being prepared for the President's submission to Congress will be held under this year's spending. Democrats will argue the prop is being pulled too fast; it will be up to the Administration to show that business, itself, will fill the gap. Unemployment, shutdowns, and local hardships will be talked up this fall.

—•—
Farm legislation coming out of Congress in its last days can be judged a "draw," politically. Eisenhower and Secy. of Agriculture Benson succeeded in breaking a "rigid 90% of parity" formula, but the new 82½% to 90% scheme won't drop consumer prices, either. The question is: Will the farmer take it? The \$2.5-billion "set aside" of present surpluses will maintain the high support of cotton, so there won't be many screams there. Beef feeders stand to benefit some, but it's doubtful that any price drops will show up in the grocery store very quickly. Wheat growers, in the politically sensitive Midwest, face a support price drop. Acreage control might help in the future, but the "sealed off surplus" will continue to weigh over the market.

—•—
Don't throw away your Korean War price-wage control records yet. Office of Defense Mobilization says there's a chance an investigator might want to take a look, and the law says you must keep them until next April.

—•—
Eisenhower will have to do some backtracking in the TVA-atomic energy power controversy. He still is expected to go through with giving a private utility combine a contract to supply electricity in the TVA area, but with some modifications. For one, AEC won't pick up the tax bill of the private utility. The new atom law prevents that.

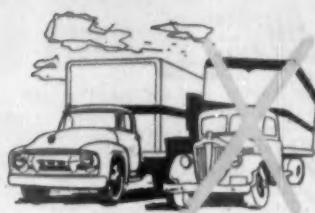
—•—
Loan sources in the federal government, a pamphlet on what agencies have money to loan to what kinds of business, can be obtained by writing to the Small Business Administration, Washington 25, D. C. There are 15 different bureaus doing lending business.

—•—
Overhaul of the antitrust laws is getting some consideration in Congress and Justice Dept. The Senate Judiciary Committee is asking \$37,500 for a study. It puts off some antitrust legislation that is pending, but matches a study being conducted by Attorney General Brownell's antitrust chiefs. A 60-man committee is finishing up its inquiry into possible law changes, expects to have recommendations by yearend.

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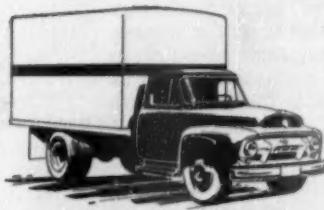
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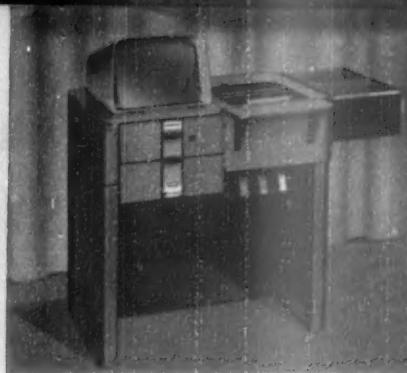
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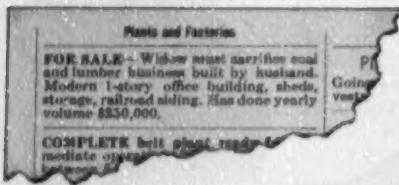
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MANAGEMENT



NEW HEADS at Braniff Airways: Pres. Charles Beard (left), Chmn. Fred Jones, executive committee chief Thomas Ryan. Their story . . .

How a Team Takes Over a One-Man Show

Braniff International Airways was always a one-man show. For 25 years, founder Tom Braniff had been its chairman, president, and principal stockholder. Then, last Jan. 10, Braniff was killed in an air crash.

The day Braniff died, the three directors pictured above were scattered. Fred Jones was in Oklahoma City tending his auto dealership and his oil business. Thomas Fortune Ryan, III, was on his New Mexico ranch. Charles E. Beard, then executive vice-president, was in Washington seeing the Civil Aeronautics Board.

Another director, Ferdinand Eberstadt, New York investment banker (picture, page 44), was in Miami about to sail on his yacht. Wires and phone calls brought them all to Dallas.

• **Quick and Smooth**—When one man leaves a one-man show, you often have trouble, a scramble for position. At

least you have rumors, a period of uncertainty for executives, workers, and stockholders. What about Braniff's case?

Eberstadt answers: "I can't remember any transition as successful in such a short time; this one took only 24 hours."

• **Changeover**—The night before Braniff's funeral, several of the directors met to plan a course of action. They agreed on a formal meeting after the funeral.

This meeting was a big one; a lot was accomplished. Jones was elected chairman; Beard was elevated to the presidency. A finance committee was formed under Eberstadt. The executive committee, which had been virtually dormant under Braniff, was put on its feet and placed under Ryan. V-P J. Wescott Miller was made executive vice-president.

A month later the five top operating

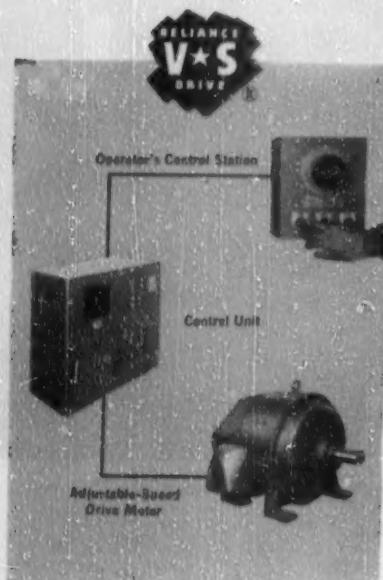
men were promoted to vice-president.

• **Old Regime**—Before Braniff's death, not one of these top 10 men held his present title at Braniff. The company in fact had only five active officer positions. Tom Braniff seldom took either of his hands off the company's controls. He was definitely the boss. Only in very recent years did he start sharing front-office duties with Charles Beard. Even then, when people thought of Braniff Airways, they thought of Tom Braniff.

In directors' meetings, he was persuasive, and that was usually enough to control the board. But if his personality failed, he had the shares and the power. One officer says, "He never quite recognized the fact that there were 5,000 other stockholders."

• **Sudden Death**—All that came to an end last Jan. 10. Tom Braniff, who had just turned 70, and nine other business

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FINANCE head at Braniff, Ferdinand Eberstadt, eases transition with airline's bankers.

executives were returning by air to Shreveport, La., from a downstate duck hunting party. Their private two-engined amphibian ran into a heavy sleet and snow storm. The wings iced over, and the pilot decided to try a forced landing on Lake Wallace, just south of Shreveport. He crashed on the bank, and all were killed. It was an ironic way for airmen Braniff to die. His airline has flown 3-billion fatality-free miles.

• **Legacy**—Tom Braniff left to his company—Braniff Airways, Inc.—a legacy of mixed value. On the plus side there were the airline's properties, with over \$9-million in current assets at the close of 1953. Part of the assets, perhaps one-third, had come to Braniff from Mid-Continent Airlines, Inc., when the two merged in August, 1952.

Also on the plus side were the line's franchises. Braniff got into business on June 20, 1928, when Tom's younger brother Paul took some passengers from Oklahoma City to Tulsa. Later it extended to Chicago, Memphis, Kansas City, St. Louis, Dallas, Houston, and in 1948 to South America. Mid-Continent brought in Minneapolis and St. Paul, and Omaha in the north, New Orleans in the south. The combined lines also make numerous smaller city stops throughout the Middle West and Southwest. Generally speaking, Braniff is a north-to-south airline. (Mid-Continent also brought to the combination its own principal owner and chairman, Thomas Ryan, and Miller, its president.)

- **Debits**—But there was a debit side to the Braniff legacy. Since the merger with Mid-Continent, there had been operating trouble. Here's how things looked at the start of this year:

- A \$1.8-million operating loss in 1953.

- A \$12.4-million long-term debt: \$10.4-million of this is being used to buy 20 Convair 340s; the remainder was inherited from Mid-Continent. The proceeds are also being used to buy 340s.

- More unprofitable stops, the company claims, than any other airline. Braniff serves 33 stations with five or fewer daily departures. Next on the list is Eastern Air Lines with 29.

Braniff Airways feels these small city stops were largely responsible for last year's operating losses. Before the merger, Braniff had a certificate from the CAB to operate one domestic route, a trunkline; this allowed it to schedule both nonstop and local flights, principally between Houston and Dallas, and Chicago. This route showed a profit last year.

Mid-Continent, however, brought Braniff three more routes—two trunklines and one local service. On all of these, the line feels CAB requires it to make too many stops; and on all three Braniff lost money last year.

Braniff's attitude has been that if the CAB wants to fill small cities' demands for air service, it should help the airlines foot the bill. Last December, 11 days before his death, Tom Braniff

applied to CAB for higher domestic mail pay. Mid-Continent had had subsidies before the merger; since late 1951, Braniff itself had only received regular mail service pay. After the merger, the combined systems received only service pay, no subsidies.

• Credits—Before Braniff died he had also done what he could to get back in the black ink. He cut the work force, increased some fares and freight rates, boosted passenger and freight revenues; and he asked CAB permission to cut out some unprofitable stops.

Braniff also sold five Convair 240s, and profit from these converted its operating loss to a net income of \$10,964 for 1953. In 1952 net income had been \$1.3-million. The company has not paid a dividend since 1951, and now credit arrangements (the long-term debt) restrict it to paying on surplus earned after Dec. 31, 1951.

• No Crisis—That was the way things were when Tom Braniff was killed. The airline looked ripe for more trouble. It was hardly the best time to lose its top man. But there wasn't any trouble. It didn't even begin to happen. Though the company still has many headaches ahead of it, it came through the first six months without its one-man boss in good shape.

Braniff died on Sunday evening. The company's stock was selling for \$6.62 a share on the New York Stock Exchange when the market closed the Friday before. On Monday morning the New York Times carried Braniff's death on its front page. The stock felt it—slightly. That day it hit a low of \$6.12. It hasn't been so low since. Last week it was selling for nearly \$10 a share.

The six months' figures, released last week, show net income of \$795,871 as compared with first half figures of \$223,612 a year ago. This was largely due to CAB action on June 3 awarding Braniff \$2,325,000 domestic air mail pay for 1954 including about \$1,366,000 of subsidy on the old Mid-Continent routes. On May 19, CAB had awarded Braniff \$586,000 in 1954 service pay and \$2,085,000 in subsidy on its international route.

• Reasons—Tom Braniff can share with the new management the credit for this improved showing—not only because he had petitioned CAB for subsidies, but because he had made provision for a smooth transfer of control and had made sure there would be competent men to carry on.

Before he died, Braniff owned about 25% of the airline's stock. The Braniff Foundation, of which he was president and his wife vice-president, controlled another 7%. His wife had sizable holdings of her own. His close friend and attorney, William Blakley, was a large shareholder and director.

After Braniff died, the foundation's

share rose to 23%; his widow became its president and Beard its vice-president. The rest of his holdings went to his wife, to relatives, to company officers. In other words, his voting power passed to his wife, his friend Blakley, and the man he obviously had picked as his successor, Charles Beard.

You can see Braniff's hand, too, in the selection of the other men who took over in management. Jones was an old friend. Ryan is one of the four largest stockholders, and an old hand in airlines and aircraft. Miller had heavy airline experience as president of Mid-Continent since 1942.

Eberstadt was needed for Eastern banking connections. The bankers, taking a look after Braniff's death at the fat long-term debt and the operating loss, began to worry. Eberstadt says: "There was some concern until the banks got the feel of the new management."

• New Setup—The new management had first of all to sell itself, and to put through an administrative reorganization. As one of them says, "Tom did too many things in the last few years. We had to divide them up."

At the first directors' meeting, the board defined administrative duties, outlined new budgetary procedures. Then Ryan went to Dallas to help get things under way. Beard and Jones went to the CAB. Eberstadt introduced the finance committee to the bankers. All the management and several directors toured the entire system. On Feb. 15, the board set up a management advisory council composed of Miller, Beard, and the five top operating men who were made vice-presidents. It meets weekly, discusses operations and policy.

One officer says: "Officers now act more as representatives of the board than ever before."

• What's Ahead—The new management has met the first test, but it still has some vital decisions to make. Braniff's immediate future, though, is in CAB hands. CAB tried last spring to get Braniff and Pan American-Grace Airways (Panagra) to join forces to form an independent carrier in South America. The two couldn't agree on terms, and in late June tossed the ball back to CAB. Braniff is also competing before CAB with four other carriers for a Texas-New York route.

Braniff has just begun paying for its Convair 340s, but competition is already forcing it to think about additional equipment. On Dallas-Chicago and Houston-Chicago flights, its DC-6s compete with DC-7s. Braniff might meet this competition by buying DC-7s, Super-Constellations—or turboprop engines for its Convairs. It won't make a decision, Jones says, until CAB decides the Texas-New York and South America cases.

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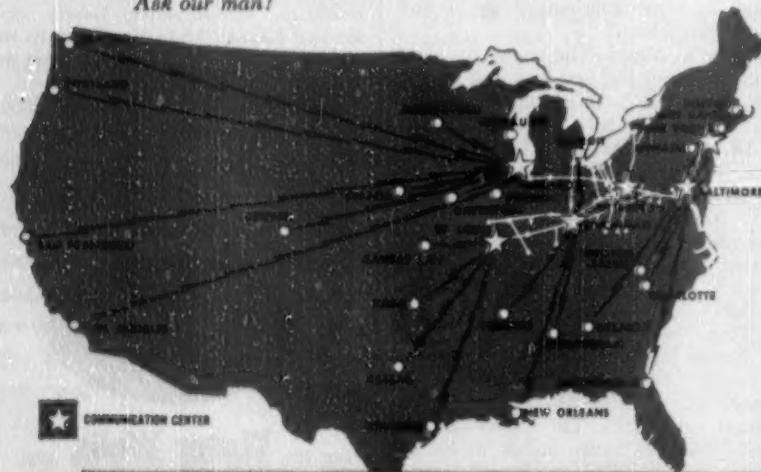


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SACKED in a management hassle, Sewell L. Avery shows what happens when an . . .

Ouster Is Ousted

Avery loses out as president of lumber company after he opposed dividend hike. He has filed court action.

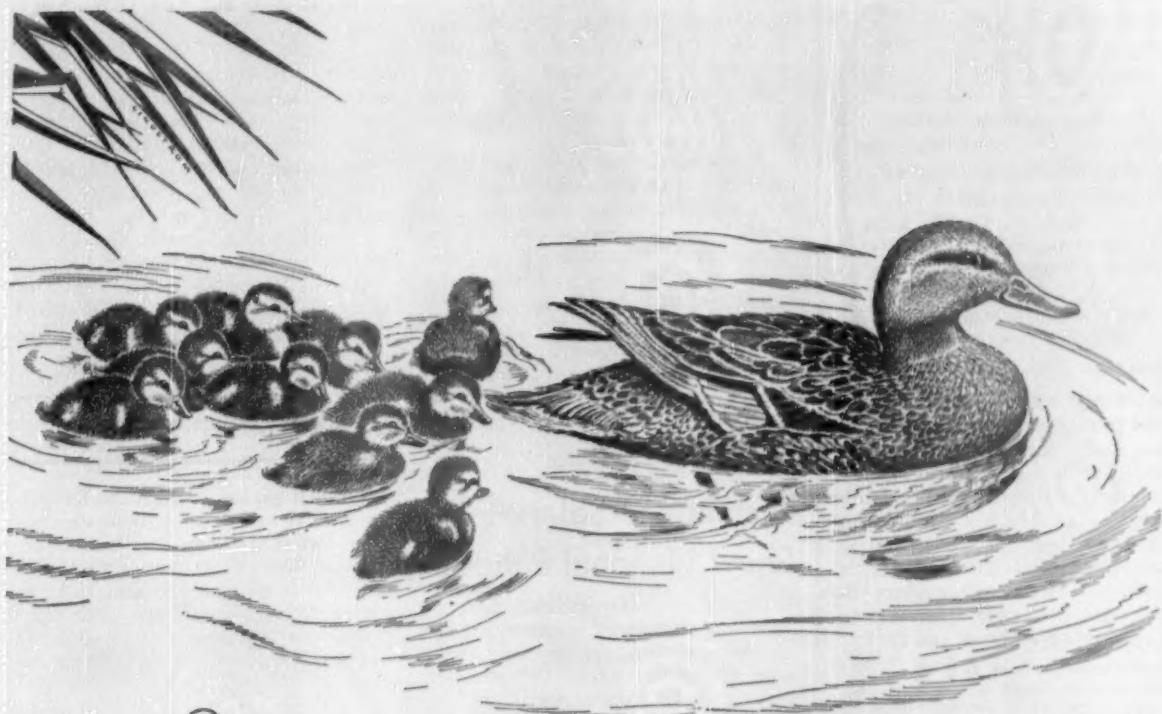
Sewell L. Avery was fired last week. He was voted out as president of Cadillac-Sault Lumber Co., Sault Ste. Marie, Mich., when he opposed a dividend increase favored by other big stockholders of the closely held wholesale lumber company. He lost in a five to four vote at a meeting of the board of directors.

The action was a switch for the 80-year-old chairman of Montgomery Ward & Co., an old hand at firing top executives. Ever since he took over management of Montgomery Ward, his rule has been notable for frequent and wholesale dismissals or resignations of presidents and vice-presidents who disagreed with his policies.

Just last week, three more top executives at Ward quit. They were P. J. Faber, manager of the radio and television division; B. M. Barrett, manager of the major appliance division; and I. E. Gervais, top man in Montgomery Ward's refrigerator and range division. All of them had long service records.

In the lumber company dispute, Avery was replaced as president by W. R. Murphy. Murphy, who led the directors in favor of the dividend increase, is the 30-year-old son of a former company executive, whom Avery removed from the job six years ago.

After Avery lost out as Cadillac-Sault president, he filed suit in Grand Rapids' federal district court to limit the company's dividend payments to current



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earnings. The suit asked that the five directors and the company be held liable for dissipation of capital in any dividend not covered by current earnings.

Defendants have filed a reply asking dismissal of the suit, and demanding the plaintiff to show cause.

The lumber company, which reportedly will be liquidated in about six years when its timber holdings are exhausted, was formed in 1923 by the consolidation of three companies, one owned by Avery and members of his family. Annual sales run about \$1.5-million.

The Averys are said to own about 20% of the stock, with three other families owning blocks of about the same size. Avery had been president since 1946.

Technicians Salaries Show National Pattern

There's a nationwide salary pattern—regardless of industry, company size, or location—for administrative and technical employees such as engineers, designers, quality control specialists.

That's the finding of an American Management Assn. survey checking into 370 employees in 32 companies representing 16 industries.

This pattern means that the spread between the highest paid and the lowest paid in any particular technical job doesn't vary much. For instance, the highest paid junior engineer in the survey got only 26% more than the lowest paid—which is probably less than the normal spread in salary ranges.

AMA says that, in other surveys of higher levels of management, salary is much more erratic—depending on profits, industry, location. For second-level management, the size of a department usually determines pay scales.

Here are other facts that AMA's continuing survey of salaried people turned up:

- Only 21% of the companies checked pay overtime to employees exempt from wage-hour regulations. Of these, a third cut that off at a \$7,000-a-year salary level.

- 35% of the companies include exempt employees in any general pay increase, but many use a \$10,000-a-year cutoff beyond which general pay hikes don't apply.

Hilton Reshuffles Statler Management

Conrad Hilton, president of Hilton Hotels Corp., quickly revamped top management of Hotels Statler Co., Inc., after his purchase of controlling inter-

est in the chain last week (BW—Aug. 7 '54, p31).

In the shuffle, Arthur F. Douglas, brother of Supreme Court Justice William O. Douglas, was dropped as president. Hilton was elected in his place.

Hilton also placed himself and two other Hilton executives on the board. Two of the old board members were retained.

Douglas had asked stockholders to approve sale of the Statler chain to William Zeckendorf, president of Webb & Knapp, Inc. The deal fell through when Hilton bought out the controlling stock from Statler heirs.

MANAGEMENT BRIEFS

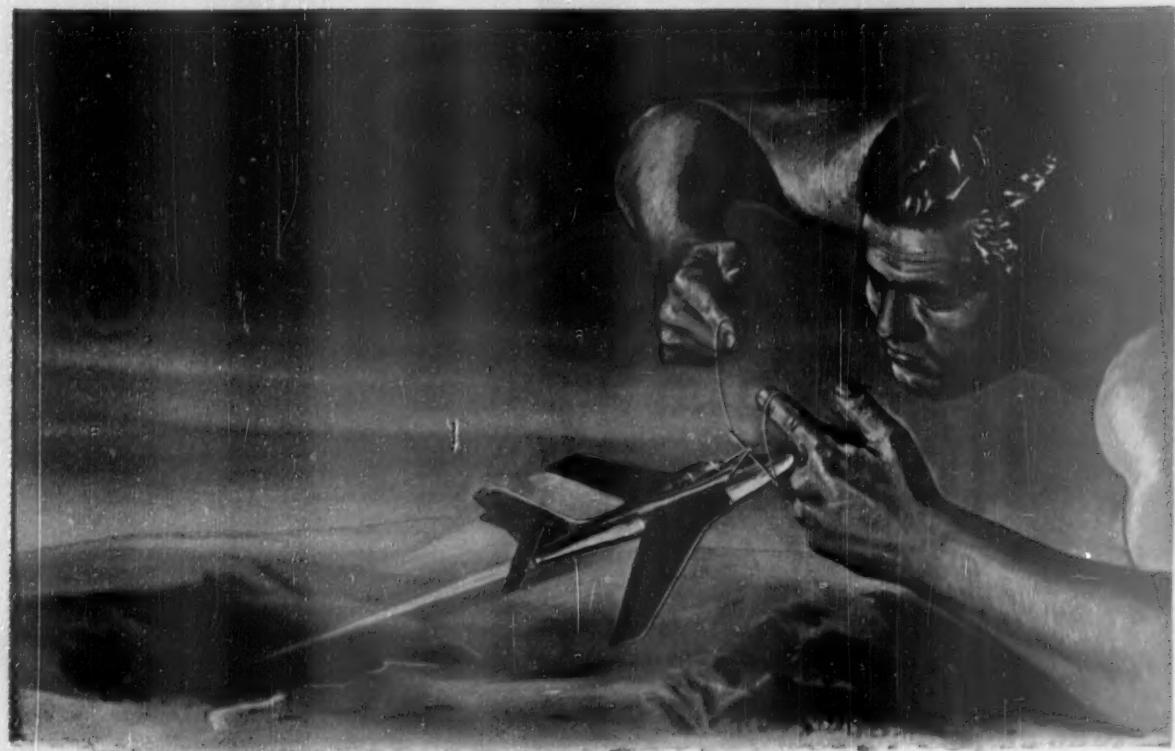
Business planes in the U.S. far outnumber those used by domestic airlines. Latest count by the Aircraft Industries Assn. of America lists 21,500 business-owned planes as against 1,269 owned by regular airlines. U.S. companies also own almost twice as many multi-engine transports as domestic airlines.

New head of Kaiser-Willy's Toledo (Ohio) operation is S. A. Girard, once a vice-president of Kaiser Motors Corp. and later of Willys Motors, Inc. Girard becomes second man in the company under K-W Pres. Edgar Kaiser. With Kaiser on the West Coast much of the time, Girard will be responsible for the operation.

Personnel staffs of most U.S. companies thinned out this year in relation to the number of employees they serve. A survey by the University of Minnesota's Industrial Relations Center showed there was an average of 0.65 staff members to 100 line employees. Last year's figure was 0.74.

U.S. Steel Homes, Inc., has a new president. He is H. Douglass Moulton, one-time engineering and sales executive for U.S. Steel Corp., the parent company. Formerly known as Gunnison Homes, the company makes prefabricated houses.

Top jobs at General Motors Corp. will be more plentiful than ever if Louis C. Goad, executive vice-president, reads the future correctly. Goad told the 600-man graduating class at General Motors Institute that groups such as theirs probably have an inside track, too. A 1953 survey, he said, showed there were 3,414 living graduates of GMI—2,399 still employed by GM, and "not a few of them" in top positions.



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SPECIAL REPORT

People: What's Behind the Scenes



Choices—in Buying, in Working

- **U.S. customers are so rich, have such a range of decisions in their buying that they baffle marketing experts—and economists**
- **U.S. workers have a new—and wide—choice as to where they'll work, how they'll work, how much they'll do**
- **It all adds up to a top problem for business. And business is turning to science to find the tools to meet the problem**
- **Here Business Week explores, for the first time, the possibilities of these new tools. To find out the sort of thing they can do, check yourself on these questions:**

Should a foreman be more interested in getting the work out than he is in the people in the crew?

It's been found that under an efficiency-minded foreman, the crew will probably be happier. But it won't get as much work done.

Does consumer income alone govern consumer spending? Or are there such things as buying and nonbuying moods?

Research has proved there are real swings in consumer mood, has found ways to measure them, is now trying to figure just how they influence spending.

Why did most housewives fail to use instant coffee for years after it came on the market?

A study demonstrated that it made them feel lazy and ashamed of themselves.

Should advertising for a familiar product emphasize its real use (that soap cleans your face), or some auxiliary value (such as scent)?

Ways have been developed to find just what does control choice among brands. But the methods involve expensive surveys and analyses.

CLEARLY, any alert and reasonably skeptical businessman is going to be asking himself some questions when he keeps running into intriguing hints like those above.

Is this sort of thing a fad, he may ask, a novelty that will blow over in a few years?

Are these fascinating bits and pieces of information the product of a full-fledged technique of human engineering on which I can rely as I can on the findings of, say, chemistry or electronics?

Is all this research producing a new way of looking at human nature that

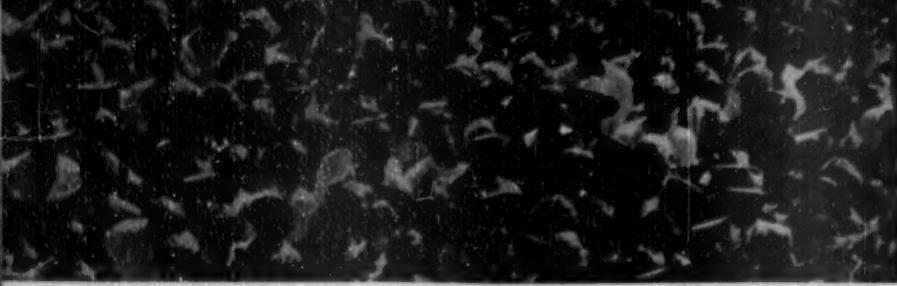
I can learn and apply in my own dealings with people?

Right now, is there anything in it for me, or is all this just a promise for the future?

For the last several months, the editors of BUSINESS WEEK have been taking a cold, layman's look at the current efforts to apply the methods and findings of the behavior sciences to business problems—talking to skeptics and enthusiasts, trying to make what amounts to a businessman's judgment of what's here.

This is the way it looks:

• One positive result of great and



"... most people, a good deal of the time, do what they want to do, not just what they have to do . . ."

MOTIVATIONS starts on p. 50

continuing importance to business has already emerged. That is the work at the Survey Research Center of the University of Michigan, an organization whose studies on the psychologic factors in the business cycle have frequently made news in **BUSINESS WEEK** (BW-Jul.31'54,p60). Its research is providing a continuing, trustworthy measurement of consumer attitudes that shape the course of business. This measure is already an important indicator of the business climate. It promises to turn into a genuine predictive tool, through an expansion of the work that the Ford Foundation will finance.

• Scattered everywhere through the research results are isolated nuggets of suggestive and useful information—customer attitudes toward specific products, indications of how workers respond to different types of treatment, clues to people's spending and saving habits, evidence on why some committee meetings are effective, why others aren't.

• No single theory of human behavior has gained general acceptance among behavior scientists. But you can sense, vaguely, that the many different, and sometimes contradictory, theories now in use are slowly converging toward a common view.

• An accepted technique of measurement and observation has definitely emerged from the work of these sciences. For business, this is perhaps the most important fact of all. It means that, if you are willing to spend the money, you can now get definite, trustworthy answers to specific questions about how and why people act, instead of relying on guesswork or intuition. "How do people feel about my widgets?" "Why do they like the red package better than the green one?" "Why do my salesclerks refuse to ask the supervisor for help when they get in trouble with a customer?" "Why are there more absences in the uptown plant than in the downtown one?"

• Today's emphasis on people's motives, the search for a science of behavior, is more than just a fad. Far from blowing over, you can expect it to keep getting more important—be-

cause it meets business needs arising from a real and important change in American society over the past two or three decades.

Take a look, first, at the nature of that change.

CHOICE has become a new, mysterious chaotic element in Twentieth Century American society. Through most of history, people have had to lead fairly circumscribed lives. Economic, political, and technical conditions just about dictated what they had to do to survive. What they had to do, they did—and a businessman who understood those conditions could deal with people fairly successfully.

Today's businessman has begun to realize that he is operating in a society so rich, fluid, and skillful that few people in it are completely governed by necessity. Most people, a good deal of the time, do what they want to do, not just what they have to do.

Take customers and their spending.

• **Defferable Dollars**—Today, Americans spend some 12% of their income on durable goods—cars, refrigerators, houses, furniture. Few of these things are "luxuries" by present standards, but nearly all of them are deferrable; the typical auto buyer has a pretty free choice whether to make his present car do for another year or get a new one.

In a sense, even the amount of income available for spending is a matter of choice, too. Backlogs of savings and easy installment credit let everyone spend last year's income and next year's income now, if they choose.

Or take another area of business. Take working.

Few people can get along without a job. But a surprisingly large proportion of people have a considerable degree of choice as to how much work they do at their jobs. Much of industry is now so large and bureaucratic that it's hard to tell who's working and who isn't. Few employers are able or willing any longer to operate on the basis that "if the so-and-so won't work, boot him out and get someone who will." Instead, they worry about how

they can get their people to choose to work rather than to loaf.

ALMOST any businessman can sense that he is operating today in a world which, in a way it never was before, is a world of people rather than a world of machinery and money and materials and logical connections.

There is a type of engineering-minded or finance-minded businessman for whom this is an irritating, a somehow unfair situation. But even for the businessman who figures that if there's one thing he knows it's people—and who has a record of success to prove it—even for him there are profound difficulties.

If he is the top man, how can he spread himself thin enough to diffuse his intuitive understanding through an organization? What can he teach the managers under him? Chances are his personal theories about why he does things aren't half so good as his actual practice is; and who is to say which of the many aspects of his personality are the real secrets of its operation.

For two or three centuries, in other areas of knowledge, people have turned to the methods of science for a way out of dilemmas such as this. It's been a powerful technique, the most characteristic intellectual device of modern civilization. So it's small wonder that in the years since the war, more and more practical men in business and government have been looking hopefully at the sciences of human behavior—psychology, psychiatry, sociology, anthropology, social psychology—hoping for usable ways of predicting or controlling people's choices.

THE BUSINESSMAN who starts looking to the scientists for help soon finds himself in an extraordinarily baffling situation. He can talk to a Freudian psychiatrist and hear about the Oedipus complex, the life-wish, and the death-wish. He can visit Harvard and see a man with a notebook sitting outside a large wooden box in which a dog is undergoing frustration. At Ernest Dichter's Institute for Mass Motivations he'll find interviewers having long, cosy chats with citizens of Peekskill about their health. At Politz Research, Inc., he'll find mathematicians working out rigorous procedures to put, in effect, everyone in America into a hat and pull them out at random. It's very confusing. Some of these people will seem to be telling him quite opposite things. But the differences in their vocabularies will be so great that it's not even clear whether they are really contradicting each other.

At the same time—tantalizingly—the questing businessman will keep running across individual research results like those at the beginning of this report,



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"... the picture starts with Freud, but only with a sort of nucleus of Freud . . ."

MOTIVATIONS starts on p. 50

conclusions that seem pointed right at his daily problems. But how seriously dare he take them?

• **Young Disciplines**—Although the behavior sciences have a long history, they are basically young disciplines. It's only in the last 20 or 30 years, most workers would agree, that these sciences have emerged from the phase of pure philosophizing and word juggling.

In the long-established physical sciences you'll find plenty of confusion and disagreement at the frontiers of research, but at the center there's a core of accepted doctrine. You can pick up any modern textbook in chemistry; all tell the same story. Contrast that with Gardner Lindzey's Handbook of Social Psychology, published this summer.

It opens with a section on "contemporary systematic positions"; the section has six long chapters, each outlining a school of thought with its own vocabulary, its own theories, its own approach to problems.

So far, the science of behavior is all frontier and no core.

DESPITE ALL THIS, anyone who spends very long poking around among the schools of thought, begins to sense a certain common ground. You get a picture of what people are like, a way of looking at people and thinking about them. Most investigators in this country would agree to most of a picture something like this:

The picture starts with Freud, but only with a sort of nucleus of Freud. The human computer, calculating a course of action that maximizes pleasure and minimizes pain, has disappeared from science. The way people act usually makes sense. But you can't account for it by logic, and the reasons for which people believe they act are often not the real reasons.

Beyond that, when Freud is translated out of Viennese into American, a lot of the original gets lost.

Except from a narrowing group of orthodox medical men, you'll hear little today about the id, the ego, and the superego, about the Oedipus complex or cathected libido. Much of this

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"...you get an impression that people in the mass may not be terribly bright, but they are really awfully nice . . ."

MOTIVATIONS starts on p. 50

apparatus, many psychologists would argue, is less a description of the human mind than a description of the middle-class Viennese mind of the early Twentieth Century.

• **Repression**—Another central element in Freudian thinking is repression—the way dangerous and painful feelings get censored out of the conscious mind into the subconscious, and the ways they leak back again to distort conscious behavior. This is a crucial matter for psychiatrists trying to cure people in trouble. But investigators trying to understand the public behavior of large numbers of people tend to ignore it and to be rather suspicious of research that claims to get at suppressed material.

Partly, this reflects a feeling that such material is the sort of private, almost random, data that cancels out—except when you are dealing with people one at a time. More to the point, is the recognition that, by definition, repressed feelings are painful feelings, and that it hurts to bring them into the light, as anyone who has been through analysis can testify. The psychiatrist's patient is suffering neurotic misery and wants to be cured; he's willing to undergo the pain, but the general public isn't.

IF THE PICTURE of human nature that permeates the behavior sciences has sloughed off a lot of Freud, it has also made major additions to his thinking. The biggest is the emphatic belief that people are inherently social. You can't understand people, this view implies, if you consider them in isolation, or even if you deal with them just as independent units influenced by, and reacting against, the people around them. Rather, most investigators now think of people as naturally and willingly members of all sorts of groups—of families, working crews, communities, neighborhoods.

Each individual gets a big share of his habits, wishes, and ideas from the groups he's part of, while he himself plays a part in shaping the attitudes of those groups.

The way things go now, a researcher

trying to understand why a factory worker bears down hard or loaf, why he is or is not frequently absent, would be less likely to probe into the individual worker's private mental processes than to investigate his relations with the rest of the crew.

PERHAPS there's a connection between this acceptance of the groupiness of people and another striking characteristic of the scientists' picture of human nature—a peculiar and pervasive sweetness.

Looking at the conclusions from one experimental study after another, you get an impression that people in the mass may not be terribly bright, but they are really awfully nice. Kindness and decency in dealing with people seems to pay off a lot more often than politicians or employers or philosophers have often been willing to admit.

It keeps turning out that you get the most work out of people if you are interested in them and friendly toward them. You sell them more if you let them make up their own minds. Democratically operated organizations are more efficient than authoritarian ones. The most effective way to deal with hostility is to increase the amount and ease of communication, to talk it out. People are more thoroughly and permanently convinced of something if you give them plausible reasons than if you just keep dinging a statement in their ears.

It's tempting, and probably partly legitimate, to take all this as scientific confirmation of things most people would like to believe. At the same time a cynic could argue, with at least a degree of justice, that results like these are only what you'd expect if you set a lot of rather gentle and friendly scientists to experimenting with college sophomores.

One social psychologist answers the challenge this way: "Maybe we've tended to ignore some of the uglier sides of human nature. Certainly you can sometimes get what you want out of people by pressure and fear. But we are demonstrating that, if you want

cooperative behavior, this is the way to get it."

THERE'S ONE MORE central theme running through the thinking of most behavioral scientists: People, it's true, are not fundamentally rational. But they are fundamentally purposive.

Human behavior rarely arises out of logical calculation of benefits and losses. But neither is it random or piecemeal. Almost always it falls into recognizable patterns—and at the center of each pattern is a motive, a need. The motive may be as immediate as to get across the street or as remote as to bring about the kingdom of God on earth. But universally—in a pedantic, but graphic phrase—human behavior is goal-seeking behavior. And the psychologist's way of studying behavior is getting to be in terms of its goals.

The words you find running through the talking and thinking and writing of the scientists are: motives, needs, wishes, drives, attitudes, aspirations. The different words have different shades of meaning and often different meanings for different users. The word "drives" sometimes is used in contexts stressing the physiological origins of motives; "aspirations" have a long-range and large-scale feeling; "attitudes" are often thought of as representing potential patterns of behavior ready to be put into effect when a suitable motive exists, as a readiness to be motivated in a certain way. But essentially they all express the same concept.

THE WHOLE PICTURE, you might say, adds up to this:

• If you want to understand a person's behavior, find out what he wants.

The hopeful layman perks up at this point: "Now we're getting somewhere," he may well conclude. "That's a good basic rule for dealing with people, for predicting what they're going to do or even for getting them to do what I want them to. Next step is to get a list of the things people really want, right down deep. I suppose you'd start with the idea that everybody wants security. Then . . . well, let's see where these scientific johnnies take it from there."

It sounds nice, but it's not that simple.

The things people want—even right down deep—are almost infinitely various. A Nebraska farmer is likely to feel quite different needs from those of a Madison Avenue account executive. Neither is likely to have the same motives as a Chicago North Side high school girl or a housewife in Spruce Pine, N. C. Moreover, the chances are that each of them, or their equivalents, had rather different motives in 1944 from those they have now. And all of them would find the deeply felt needs of a Pueblo Indian almost incomprehensible.

"The most inclusive statement that can be made about human nature," says one standard textbook, "is that humans have an enormous capacity for acquiring motives."

• **Learned**—Most motives, and nearly all the interesting ones, are learned motives, picked up through the experiences of a lifetime. In a diffuse society such as ours, which offers an immense variety of experiences, it's no wonder that you encounter all sorts of different motivations.

The motive-learning process itself seems to be simple enough. When a human being feels a need, he seeks out a means to satisfy the need. Before long, the means itself is felt as a new need—a need that may persist as such even after the original need it satisfied has disappeared.

A baby at birth has a mere handful of physiologically determined goals—food, water, warmth, and the like. (A few more develop later on, sex needs and probably a physiological need to care for children in women who have recently given birth; but the gamut is not now considered ever to be very long.)

• **Means and End**—The hungry baby discovers that the nearness of its mother satisfies hunger. Within a week or two, the nearness of mother is a goal in its own right. Later on, the mother's approval becomes a means to her nearness and goes through the same process. Still later, being a good boy becomes a means to mother's approval and then, in turn, an end in itself. And long after the nearness of money has become a better way than the nearness of mummy to satisfy hunger, many men remain fond of their mothers. Even in a man estranged from his family, the need to be a good boy may make him an upright citizen and a good security risk.

A simple process. But obviously it doesn't have to go through very many branches to produce an immensely complicated pattern of motivations. Clearly, the pattern is far too complicated to be dealt with by any list of "the ten basic motivations in people."

"**WELL THEN**," says the hopeful layman, "have I still got anything in that rule about dealing with people by finding out what they want? It seems they can want almost anything."

It's still a useful rule even though it's no slide rule for human relations. In dealing with one person face to face it's not usually too difficult to find out what he wants. You can ask him, for instance. Sometimes, of course, he doesn't really know or won't tell you. But even then if you pay attention to the way he acts in various situations you can often make a pretty good guess at what he's after.

This, of course, is the way men who

are sensitive and skillful in getting along with people have always operated. The new problem is to find ways of applying the same sensitivity and skill to dealings with large numbers of people—with 500 employees, with a million customers, with a dozen members of the board of directors. And it's here that the findings and techniques of the behavior sciences have something to offer.

TO START WITH, the vast jumble of possible human motives is not so chaotic as it might seem. If you look at the groups of which people are members, you find that on subject matter relevant to each particular group the members of the group tend to share the same needs and wants.

This is not the elementary matter of classification it sounds like. It's not, for instance, just that because of the nature of farming farmers always want high prices or always want to be independent. Rather, it's things such as this: "Right now the men in the No. 2 hammer crew in the foundry want to produce 42 units a day, no more, no less."

You can do more than just classify people; you can observe the current goals of functioning groups of people. (Thus, it might make psychologic, as well as statistical, sense to say that "this year most farmers want high crop price supports, and they want them more than they want to be free of production controls.")

• **By Accident**—To a degree there's an almost accidental element in the existence of group motives; people with similar needs often tend to get into the same groups. Then, too, people in the same groups have common experiences, which would tend to produce similar needs. But beyond that, something more important and less obvious is involved.

The essence of it is this: A basic property of groups is that they tend to generate and enforce shared motives in their members.

The success of Alcoholics Anonymous is a startling demonstration of the strength of the forces involved.

Just how groups do this is not yet clearly understood. A great deal of work is being done on where the shared motives come from in the first place, why some people are able to resist them and why some aren't, by just what mechanisms they are enforced on the members.

Here's one such mechanism, for instance: Observations of many natural and experimentally created groups show that the members talk especially often to anyone who wants something different from what the group wants. The greater the deviation the more the talk. The effect of two people talking is

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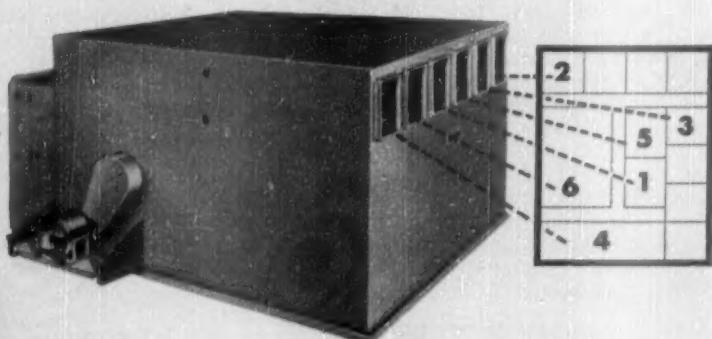
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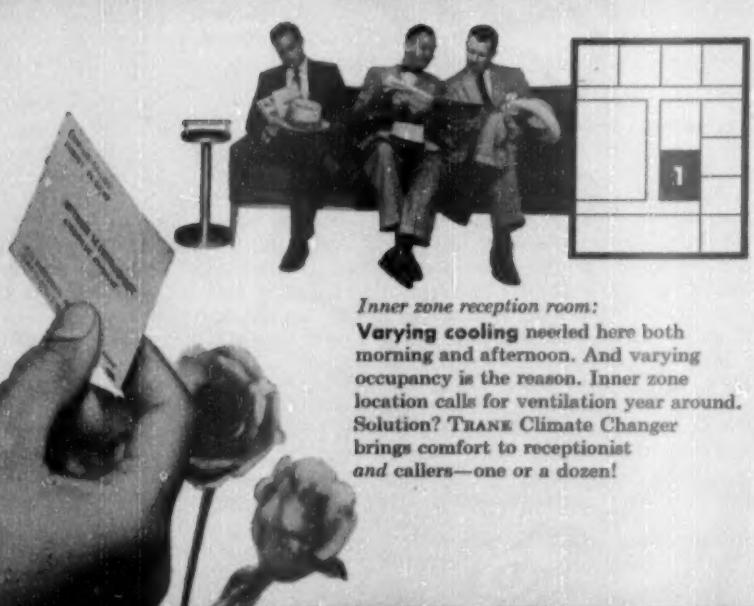
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Inner zone reception room:

Varying cooling needed here both morning and afternoon. And varying occupancy is the reason. Inner zone location calls for ventilation year around. Solution? TRANE Climate Changer brings comfort to receptionist and callers—one or a dozen!

North exposure:

Light cooling . . .

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South exposure:

Very heavy cooling . . .

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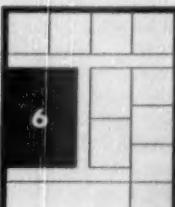


West exposure:

Light cooling, a. m.

No sun in the a.m.—but wait until the p.m.! That's the story in this west-facing room. Light cooling a.m., peak cooling p.m. Reverse is true for winter heating. TRANE Climate Changer's *always* on the job!

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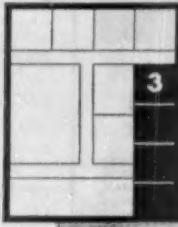


East exposure:

Peak cooling, a. m.

Here the morning sun is bright. And rooms need *more* cooling when there's sun, less when there's not! Reverse is true for winter heat. TRANE Climate Changer makes the switch. Smoothly!

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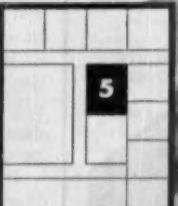


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"... will the behavior sciences eventually permit a psychologist to design a personnel program the way an engineer designs a bridge? . . ."

MOTIVATIONS starts on p. 30

to bring their needs closer together. Hence the deviant in a group is exposed to a force toward the center, which increases the farther he deviates (up to some critical point where he leaves or is expelled from the group). Obviously, a dynamic system of this sort would tend to maintain uniformity.

• **More Manageable**—This property of groups makes the whole problem of dealing with people's motives much more manageable. In dealing with a particular population of people you don't have to operate just on the basis of some statistical average of the vast range of human needs represented, being effective with the few people who happen to fall close to the average, but losing contact with the rest. Instead, you can expect that people's motivations will fall into identifiable clusters, each enforced by one of the groups in the population. If you can locate these motive clusters you are in a position to deal intelligently with nearly all the people involved.

It looks as if our one-sentence summary of a few pages back could be expanded into something like this:

- To understand people's behavior, find out what they want.
- Don't make the mistake of thinking they all want the same thing.
- One good way to find out what they want is to find out what the groups they belong to want.
- One good way to change what they want is to work through the groups they are in.

The trick still is to locate the significant clusters of motives. There's just one way to do it. You go out and look for them. This takes money in fair quantity and expert help. But so far there's nothing in science to substitute for it.

There's no calculus of motives that will tell you in advance how people feel.

CAN ONE FORESEE such a calculus in the future? Are the behavior sciences moving in a direction that might eventually permit a psychologist

to design a personnel program the way an engineer designs a bridge? It doesn't look that way now.

Some temporary and not entirely trustworthy consistencies do show up already. For example: The Survey Research Center at the University of Michigan has been investigating the attitudes of crews of semi-skilled workers in large companies, several utilities, insurance companies, manufacturing plants, and a railroad. There's an important and amazingly consistent motivational pattern running through all these. It will be described later in this report, but the point here is that the researchers at the Survey Center would doubtless now predict—and be rather startled if they were wrong—that investigation of similar work crews at other companies would show the same pattern.

• **Beginnings?**—That's significant. It almost sounds like the beginnings of a calculus of motives. But you still have to remember that the consistencies are limited to a particular type of crew doing a particular type of work. Moreover, you have no assurance that the same pattern will exist 10 years from now.

Another possibility. If you look at the direction of present studies of the structure and functioning of groups, of the interrelations among their members,

REPRINTS AVAILABLE

After Parts II and III of this Motivation study have been published, reprints of the entire study will be prepared. They will be available about four weeks later. Single copies of the study will be sent to BW subscribers upon request without charge. Other copies will be billed at the following rates: 1 to 10 copies, 50¢ each; 11-100 copies, 40¢; 101-1,000 copies, 30¢; over 1,000, 25¢. Address orders to Reprint Dept., *Business Week*, 330 West 42nd Street, New York 36, N. Y.

you can suspect the possibility that eventually it may be possible to pinpoint investigations of motives and attitudes. In other words, you might be able to find the crucial core of feeling in a particular group and concentrate your observations on that. Or it might be possible, knowing the motivations of a particular group, to predict some of the motives of another group differing from it in known ways.

• **Guessing**—But that's all speculative. For the present, the type of predicting that can be foreseen with some confidence might be exemplified by a long term project going on at the Yale Labor and Management Center. The center has been developing a system for analyzing the operations of organizations—a company, a hospital, a union, or whatever. Interviewing most of the people in the organization, the analysts get a picture of the functions to be performed and of the formal and informal requirements and satisfactions for anyone who performs the functions.

At the same time, with other questions, they are finding out the needs and hopes of the particular people in the organization. Matching these two sets of data against each other, they construct an "index of fusion," measuring how well they match up.

At this point the Yale people think they can make a general statement: An organization with a low index of fusion is in for trouble.

From this index the Center has been able to predict with rather startling accuracy that certain people would leave an organization, that there would be trouble in certain departments, and the like.

THERE'S NO SIGN then that the science of behavior is getting ready to spawn some monster of human engineering, manipulating a population of puppets from behind the scenes. Indeed it's hard to find anything very sinister about a science whose principal conclusion is that you get along with people by giving them what they want.

Meanwhile the great achievement of the science—one of the major triumphs of the social sciences—has been to develop powerful methods for finding out what any particular set of people do want at any particular time. It's now possible, if you'll take the trouble, to find out how any population you are interested in feels about almost any subject you want to name, how intensely they feel it, and—sometimes—why they feel that way.

For the next two weeks, in the remaining sections of this article, the editors of **BUSINESS WEEK** will report to executives on how some of these techniques work and on some of the specific discoveries about customers and workers that have come out of their use.



WATER in the Northern Plains

If all the underground water in one Northern Plains state were on top of the ground, it would form a lake 420 miles long, 210 miles wide and about 20 feet deep.

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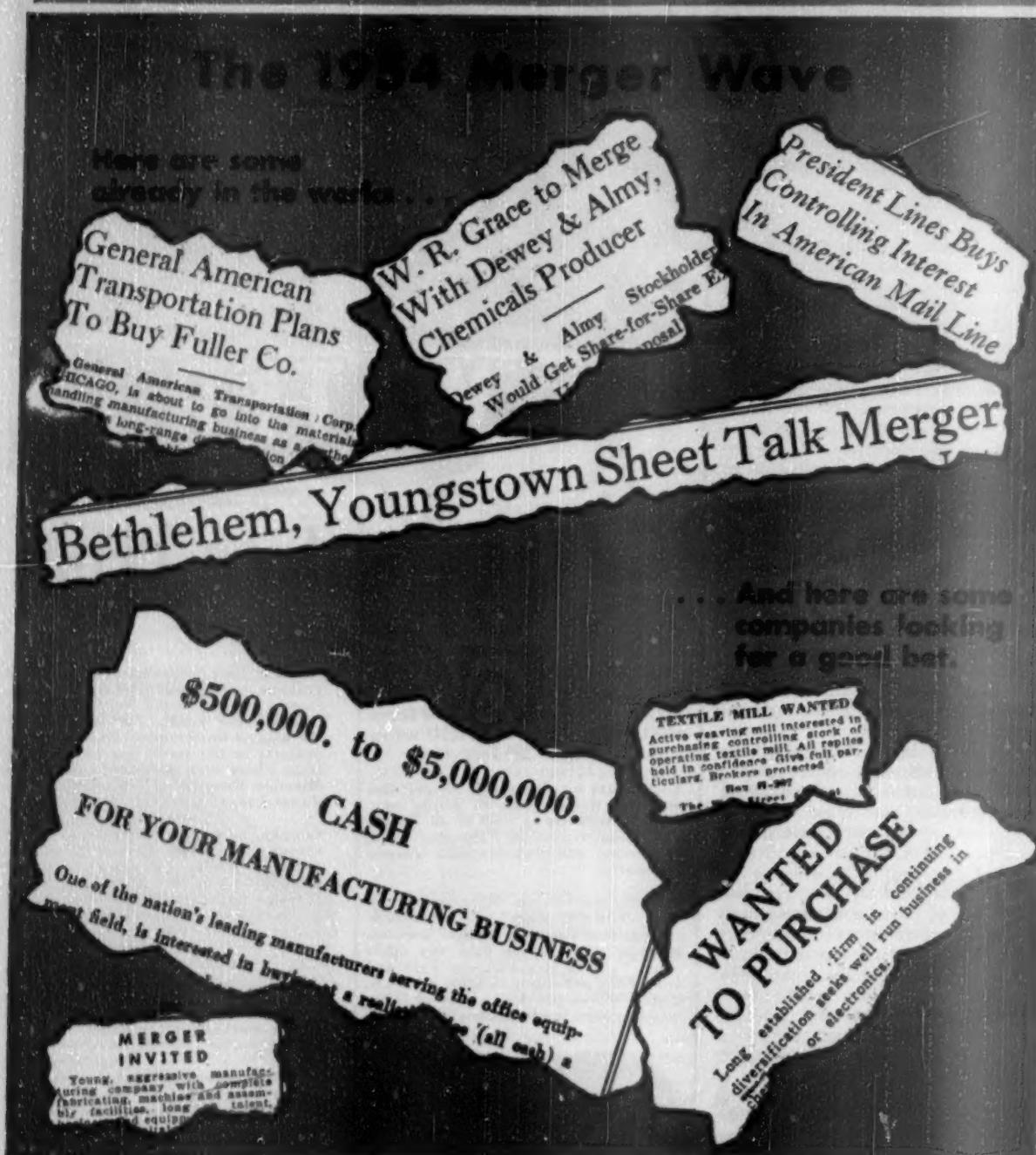
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What Lies Behind the Headlines

It seems to be good merger weather. There have probably been more corporate weddings, engagements, and rumored romances in the news lately than at any time since the late 1920s. Amid all this, many an executive is likely to wonder whether his company ought to merge with somebody, too.

If he thinks about it seriously, sooner or later he will find himself asking questions in three main categories:

Why do companies merge? What would my company stand to gain?

On what pattern should the merger be drawn up? Should my company try to get together with one in our own

field of business, or with one in an entirely different field? If we decide to make it one in our own field, should it be a company that does exactly what we do? Or should we try to join forces with, for instance, one of our raw materials suppliers?

How does a corporation merger work,



Does paper freight keep you in low gear?

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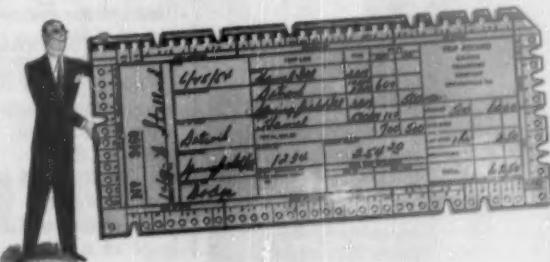
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mechanically? How do we find the right company, get together with it, decide who should pay whom for what?

- **Panorama**—The first two of these groups of questions can be answered fairly well by looking around at the panorama of 1954 mergers. A company might have any of several reasons for seeking a merger. And—generally speaking—these are the reasons that determine the merger pattern:

- A company might want to reach out beyond its own operation. For instance, a paper manufacturer might reach backward and acquire a lumber mill, or forward and acquire a paper products company or perhaps both. This would put the company in a position to save money all along the line. This type of merger is sometimes called "vertical."

- A company might want to join forces with another that makes the same product, and perhaps sells it in the same territory. The idea behind this is to improve competitive position, make savings in purchase of materials, and get the advantages of a bigger sales network. This kind of merger is often called "horizontal." Examples are recent mergers in the auto industry—Studebaker and Packard, Nash and Hudson.

- Diversification may be the goal of a merger, especially during times of fierce competition. Take the case of Westinghouse Air Brake Co. To back up its railroad equipment business—which is prone to heavy fluctuation—the company acquired Melpar, Inc., an electronics and research company; Le Roi Co., maker of industrial compressors, engines, and construction and mining equipment; and Le Tourneau Co., manufacturer of earth-moving equipment.

- Another reason behind a merger may be a desire for high-grade management. There's one case on record in which a company merged, at a cost of some \$1-million, mainly to get the services of the other company's president and its chief executive officer.

- Still another reason was in the mind of Texas Instruments, Inc., when it merged with Intercontinental Rubber Co. (BW—Apr. 17 '54, p80). Texas Instruments wanted, among other things, the rubber company's listing on the New York Stock Exchange. Conventional steps toward getting a Big Board listing can sometimes take as long as five years.

It's not always true, of course, that a company has a single, clear-cut reason for joining forces with another. More often than not, a combination of motives dictates the move. In the current spate of marriages in the textile industry (BW—Jul. 31 '54, p58), there are all sorts of motives—from the hope of a big company to diversify to

the simple desire of a struggling small company to be bought. In the steel industry, the prime motives behind mergers have been (1) to improve competitive standing and (2) to diversify.

- **Spreading the Word**—How have all these mergers been brought about?

Strangely enough, some of the biggest mergers have started with a casual remark. An executive is chatting with his banker, or his lawyer, or with a remote business acquaintance. He lets fall the observation that a good way for his company to boost its sales, or solve its supply problem, might be to buy another outfit.

This seed, planted unwittingly, may take root and eventually grow into a full-fledged rumor. The word runs through the trade: XYZ Co. is looking for another to buy. And sooner or later, XYZ Co. hears from one or more companies that would love to be bought. XYZ may not have been considering a merger before, but now that the opportunity has been delivered neatly packaged to its door, it may decide to act.

This is the way many mergers have been initiated. One consultant on mergers explains it this way: "Owners wishing to dispose of a company are reluctant to come out flatly and say their property is for sale. It's only human nature to be reluctant about making such a disclosure until after a serious buyer has shown himself ready to put cash on the barrelhead. Premature disclosure might lose the company valuable personnel, and also sales.

"But let a strong company with good earnings and a supply of cash drop the hint that it's looking for a suitable concern to acquire, and the word on those that can be had—and at what price—flushes out fast."

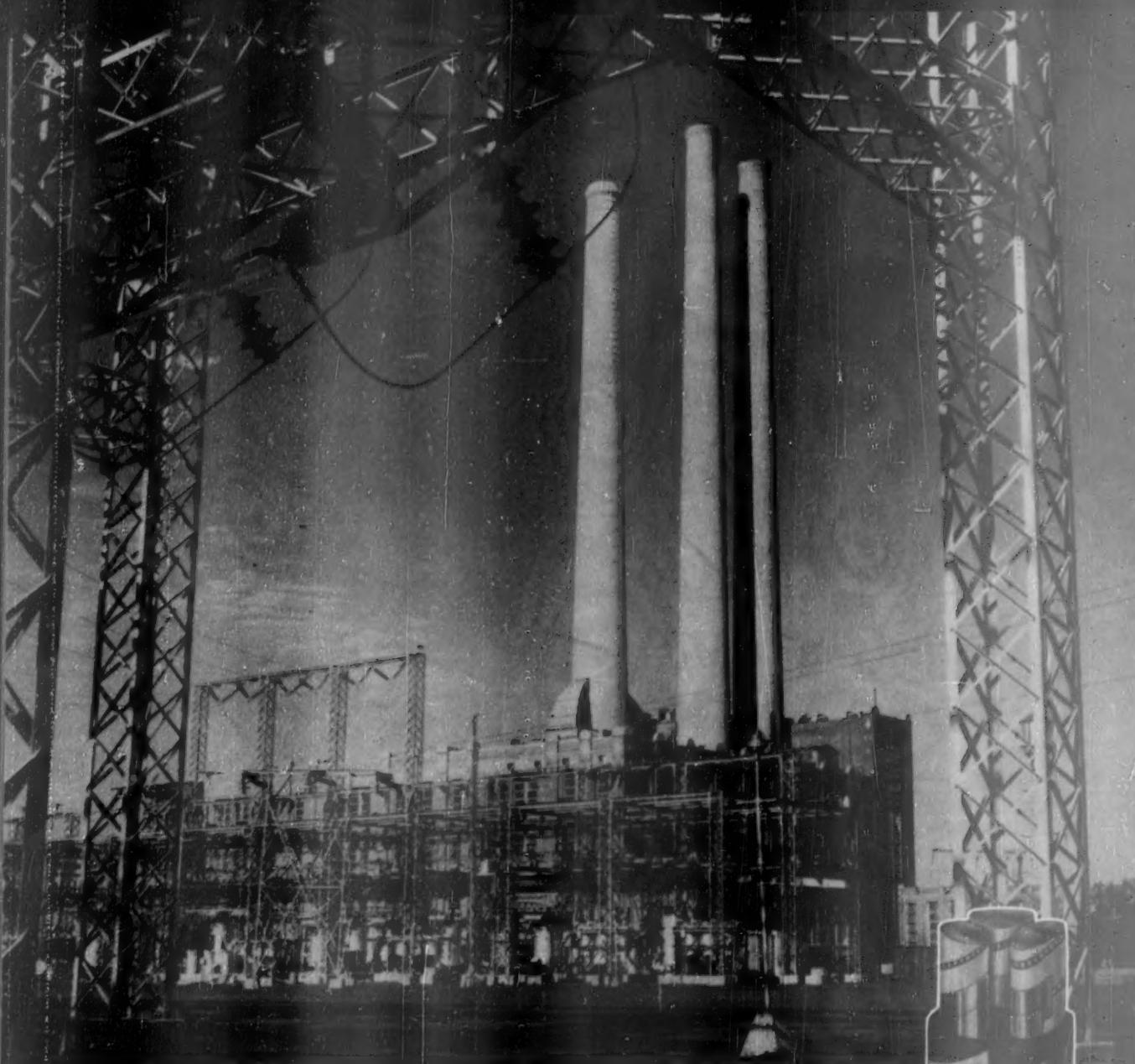
- **Intermediaries**—Not all mergers are accomplished, however, by the hint-and-wait method. Sometimes a company with a definite desire to make a merger will go about finding a partner systematically:

- It can get in touch with a big investment banking house, such as Lehman Brothers of New York.

- The company may go to a brokerage firm, such as New York's Merrill Lynch, Pierce, Fenner & Beane. Many brokerage houses on the Stock Exchange have a fair amount of experience in finding congenial partners for merger-minded clients.

- The job can be put in the hands of a private company that specializes in negotiating mergers, such as Hammond, Kennedy & Legg Co., of New York.

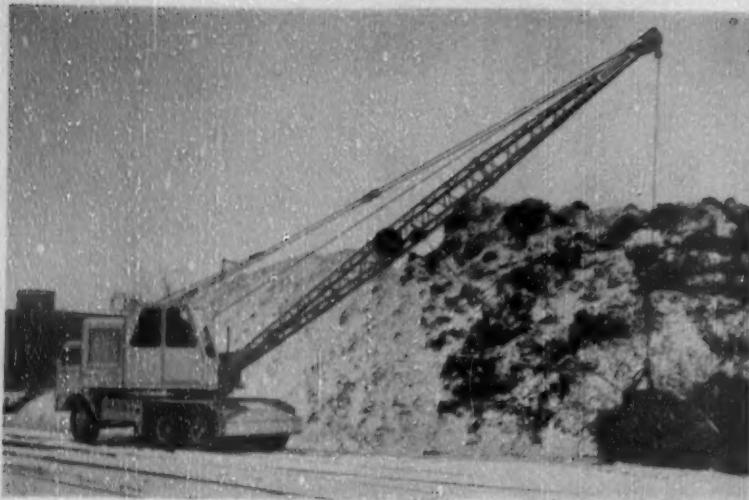
- **The Job**—The intermediary—bank, broker, or merger specialist—plays an important part in the affair. Having brought the merger partners together, the intermediary often takes on the



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job of determining what the two companies involved are worth.

Investment banking companies often have on hand the skilled personnel necessary for this task. Brokerage houses, however, generally prefer to assign this part of the merger negotiation to a specialist.

The task involves evaluating (1) the present and projected earnings of the principals in the merger, (2) their fixed assets, and (3) their managements. "Very often," says one merger expert, "considerations of earnings and facilities are secondary to management."

Next, the intermediary faces what can be the hardest job of all—getting the two companies to agree on terms. "In most cases," says one man in the field, "the owners of the two companies know exactly what their corporations are worth, and have arrived at prices they say are 'final' terms."

"The intermediary's job is to adjust the difference by getting one company, or both, to modify 'final' figures. If both parties really want the merger, terms agreeable to both can usually be arrived at."

• **Change**—The men who arrange mergers have been working hard this year—and this worries some observers. They wonder if we are moving toward an era in which big companies, having absorbed the little ones, will be doing all the business. The merger experts hasten to dispel this picture.

One merger consultant took a business census of his own in 1947. He found that there were then 8,000 U. S. companies with a net worth of \$500,000 or more. Last year the number had swelled to 14,000. This proved to him that "new, successful enterprises are being formed and growing up faster than established companies are uniting with each other."

House Sales Off

Volume of housing sales for the first half of 1954 was slightly lower than the first six months of last year, although prices generally have remained near last year's levels, according to a survey by the United States Savings & Loan League.

The nationwide survey also found there were a larger number of both new and used houses on the market than a year ago, with the market for used one-family houses particularly weaker.

Other significant findings:

- Medium and low-priced houses remain on the market about 30 days longer than they did a year ago.

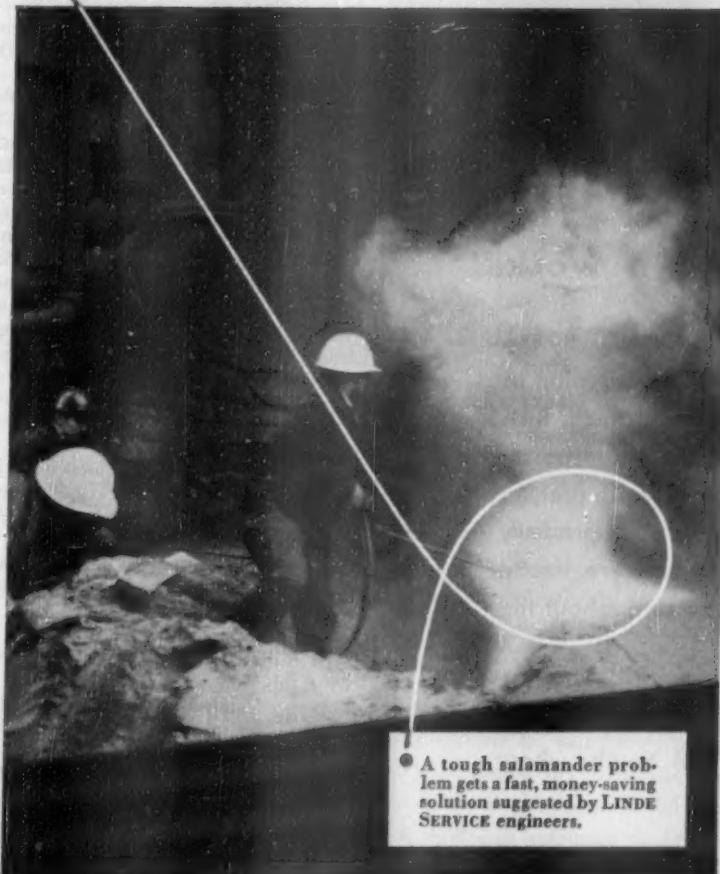
- Lower-priced and prefabricated houses constitute a larger share of the market than in 1953.

- Rental housing is still tight, with over half the areas surveyed reporting a shortage.

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WORTH OF PIG IRON PRODUCTION**



• A tough salamander problem gets a fast, money-saving solution suggested by LINDE SERVICE engineers.

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In steel mills, removing salamanders from blast furnaces formerly was a costly, time-consuming business. You had to cool the furnace before you could blast and remove the solid salamander.

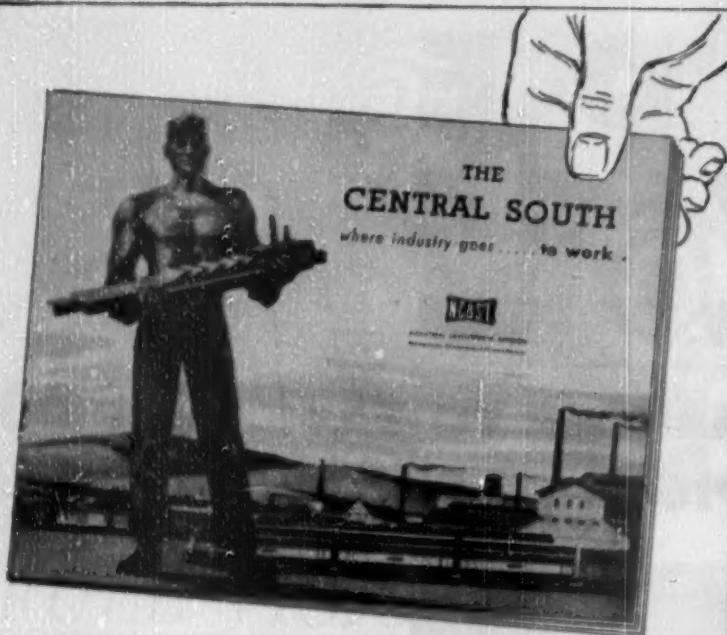
The oxygen powder lance, developed by LINDE engineers, makes the removal of a salamander in a molten state possible — eliminating the long cooling period. A sluiceway is lanced through the bottom under the hearth plates and the molten metal allowed to run out.

This LINDE SERVICE method saved six days of production at 900 tons a day for one steel mill. The savings? \$270,000 worth of pig iron production.

*LINDE SERVICE

is the unique combination of research, engineering, and more than 40 years of accumulated know-how that is helping LINDE customers save money and improve production in their uses of oxygen and oxy-acetylene processes.





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New No. 1 Bank

Stock increases at New York's National City will make it the world's largest bank—in a way.

New York's National City Bank is planning an increase in its capital stock that will make it the world's largest bank in terms of capital accounts. By a vote of its directors this week, National City, the nation's second largest bank in terms of deposits, will offer 2.5-million shares of capital stock to present stockholders at \$52.50 per share. (The stock is currently selling over the counter at \$54.75 a share.) The \$52.50 price would represent a yield of 4.57% at a new dividend rate of \$2.40 a year. The bank has been paying \$2 a year, but will increase its payments concurrent with the new offering.

This increase of capital stock would raise National City's capital by \$131.3-million, and pump its capital and surplus—including funds of its affiliate, City Bank Farmers Trust Co.—to over \$500-million. Total capital accounts, adding undivided profits to capital and surplus, would then be about \$560-million. Besides pushing National City ahead of San Francisco's Bank of America National Trust & Savings Assn. in capital funds, the stock increase would cut the bank's ratio of deposits to capital funds from about 13-to-1 to the traditionally "safe" ratio of 10-to-1.

• **Leak**—The move to increase the bank's capital stock and raise the dividend was far from unexpected. Although the bank refused to affirm or deny the increases until Tuesday's board meeting, the news had leaked out more than a week before.

An underwriting group headed by First Boston Corp. will handle the deal with the new shares being offered to holders of record as of Sept. 24 at the rate of one new share for every three shares held. Warrants for purchase of the new shares will be good from Sept. 30 to Oct. 22. Any shares not taken by stockholders go to the underwriters.

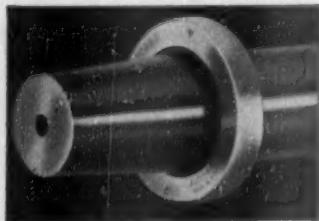
National City now has 7.5-million \$20-par shares outstanding, with a book value of \$54.08 a share. The last time the bank increased its capital stock was in 1951, when it offered 1-million shares at \$40 per share to holders of capital stock. In 1953, National City paid a stock dividend of one share for every 24 shares held.

• **Merger**—On the heels of the talk about National City's capital and dividend hikes, rumors of a merger of National City and New York's Corn

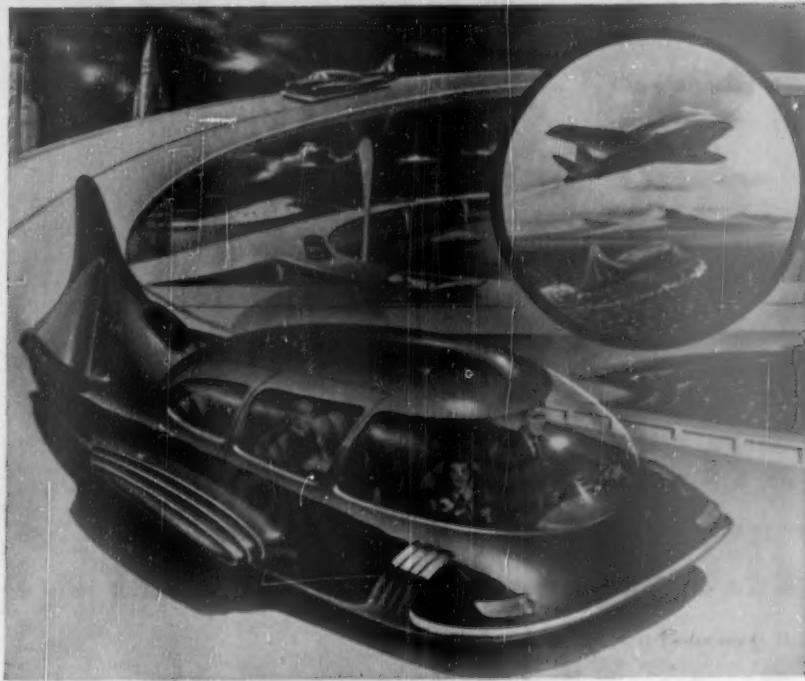
AUTO-MAKING



You probably own 10 or more oil seals—almost 50 million families do. Oil seals are used throughout every car, and in tractors, trucks and buses, too.



Oil seals "seal" with a steel-encased leather or synthetic rubber member that fits snugly around shaft; keeps oil or grease in, dirt and water out. Fit must be perfect or seal won't work.



Future cars: what will they be like?



Like other car parts, Detroit tests oil seals to be sure they will work right for you. Excluding water from wheel bearings is just one vital thing seals do.



SAFE DRIVING TIP: Regularly, and before vacation driving, have front wheel bearings repacked and new oil seals installed. Old seals can leak, cause bearing failure or grease on brake lining. New seals cost little, keep grease clean and in place, help insure smooth, safe front wheel operation.

Nuclear engines, radar, retractable wings, a pressurized, water-tight body. Perhaps by 1964 these features will be standard—your family sedan will fly, and swim, too. But one thing is certain: Detroit will never compromise with the sound functional engineering which has made American cars the envy of the world.

To incorporate still more stamina, performance and dependability into motor cars, engineers are using more oil seals each year. (Some cars have 25 or more.) Detroit has long recognized the importance of oil seals in keeping road dirt and water out of wheels and engines, keeping lubricants and fluids where they belong.

Over three decades ago National pioneered oil seals. Since then we've made 250 million of them for American cars, trucks and buses. Plus millions more for farm implements, earth-moving and railway equipment, machinery and appliances. Today we can offer you over 2,500 different standard-design seals; or can manufacture special seals for special problems.

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Original equipment on cars, trucks, buses, tractors, agricultural and earth-moving equipment, railway rolling stock, machinery and appliances.

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2025



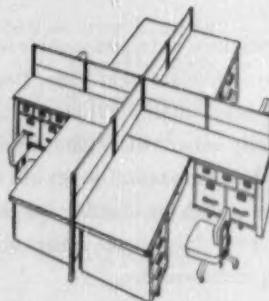
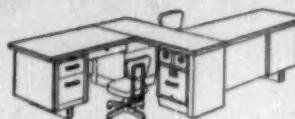
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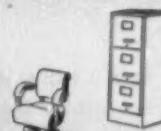
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and Visible Records



Cincinnati 12, Ohio

Exchange Bank Trust Co. sprang up. Although the rumor was denied by National City, Corn Exchange stock zoomed nearly 10 points on the strength of speculation.

While National City just about ruled itself out of any merger by its denial, New York's Chemical Bank & Trust Co. took the spotlight as a prospective partner in a merger with Corn Exchange. Such a merger would make the resulting bank the sixth largest bank in the country—Chemical Bank currently ranks tenth, Corn Exchange 21st in deposits.

FINANCE BRIEFS

Class 1 rail earnings for the first six months were off 46% from the 1953 period, according to the Assn. of American Railroads. This year's net after all charges was \$224-million, compared with \$418-million. For June alone, the drop was less steep; the roads netted \$59-million in the month, 26% less than the year before.

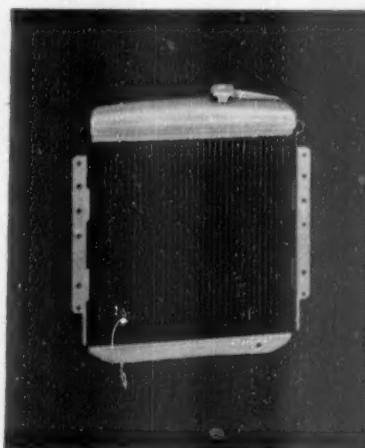
The Big Board has just had its most active July since 1933, and the biggest month since January, 1951. Trading on the New York Stock Exchange topped 2-million shares on all but two July trading days. Sales for the month were 51.6-million shares, compared with 42.2-million in June, and only 22.2-million in the year-ago July.

A big first half for General Motors had profitable repercussions on its consumer financing subsidiary, General Motors Acceptance Corp. GMAC's earnings for the first six months were \$18.3-million, compared with \$11.1-million the year before.

Clean slate: Bethlehem Steel Corp. announces that it has erased its short-term debt, with the repayment of \$200-million it borrowed from banks a few months ago. Working capital was \$452-million at midyear, Bethlehem says, up from \$414-million three months earlier.

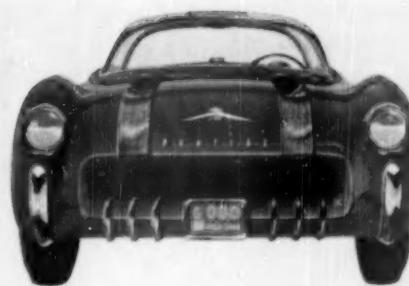
Private placements of late have included: \$5-million Central Illinois Public Service 4 1/2% preferred; \$7-million 20-year 3 1/2% debentures and \$4-million 4 1/2% preferred by Rockland Light & Power; \$26-million 8-to-10-year Southern Production Co. notes; \$6-million Triangle Pipeline Co. serial mortgage notes; \$8-million Bulova Watch Co. 15-year 3 1/2% notes; \$15-million Hunt Foods, Inc., 20-year 4% notes; and \$20-million United Air Lines 30-year debenture 3 1/2%.

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Harrison
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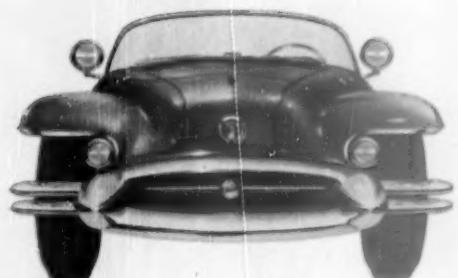


New ideas on wheels! And Harrison is keeping pace with these low, super-streamlined General Motors "dream cars". Behind each beautiful grille is a Harrison radiator . . . specially designed to cool the high-performance, high-powered engine. And no one is better equipped to design radiators for the cars of tomorrow than Harrison . . . leader in cooling the cars of today. For Harrison has the facilities . . . research, manufacturing, engineering! And Harrison has the *experience* . . . experience gained in the production of more than 57,000,000 radiators for cars, trucks and buses. If you have a cooling problem, look to Harrison for the answer!

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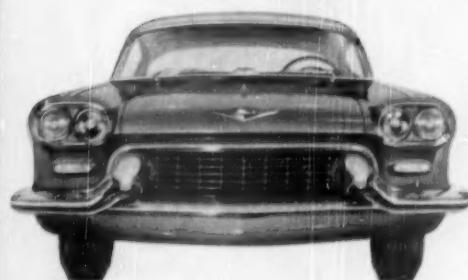
WILDCAT II . . .
Sports convertible by Buick features "flying wing" front fenders.



CORVAIR . . .
Existing sports coupe by Chevrolet with "fast back" styling.



CUTLASS . . .
Dynamo on wheels by Oldsmobile, with 250-h.p. "Rocket" Engine.



EL CAMINO . . .
"Aircraft styling" gives Cadillac's "dream car" a rakish look of the future.

HARRISON

RADIATOR DIVISION, GENERAL MOTORS CORPORATION, LOCKPORT, N.Y.

Safest way to give a box



Boxcar a dose of hot salts

Hard-to-handle problem for a large chemical manufacturer was the bulk-loading of hot calcium chloride pellets into boxcars. Production efficiency and the extremely hygroscopic, moisture-absorbing nature of this chemical salt demanded it be loaded direct from hoppers at 300° F.

The real bottlenecks were the downspouts. Metal tubes were too rigid, too heavy and generally too cumbersome to handle. Canvas sleeves failed in anywhere from a few hours to a few days due to temperature and abrasion. Wire-reinforced, coated fabric tubes were only a slight improvement. Each failure caused serious loss of valuable material and costly shutdowns. Finally the G.T.M.—Goodyear Technical Man—was asked to help.

His answer was a specially designed, large-diameter hose that resembled an elephant's trunk in size, flexibility and toughness. This Dry Materials Hose fully resisted the heat,

abrasion and corrosion for over a year. It was easy to handle — ended the shutdowns — much more than paid for its extra cost in extra safety and extra service.

Just one of many uses of Dry Materials Hose is the handling of corrosive chemicals. Cement, powdered coal, grain, gravel, sand, sugar, sawdust, ice, rock wool insulation, fly ash and fertilizers are just a few of the materials that can be more economically handled by such hose in gravity flow or pneumatically powered systems.

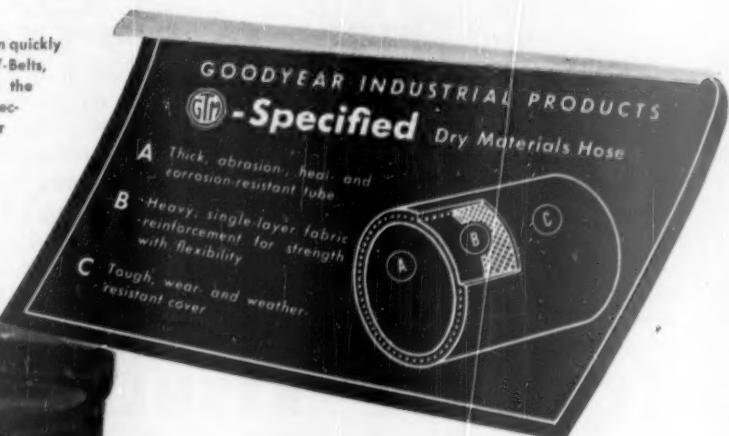
In fact, anything flowable or pumpable usually can be efficiently handled by one of the over 800 types of hose manufactured by Goodyear. The G.T.M. can tell you. Just as he can tell you how to get the most out of rubber in every imaginable industrial use. You can contact him through your Goodyear Distributor or by writing Goodyear, Industrial Products Division, Akron 16, Ohio.

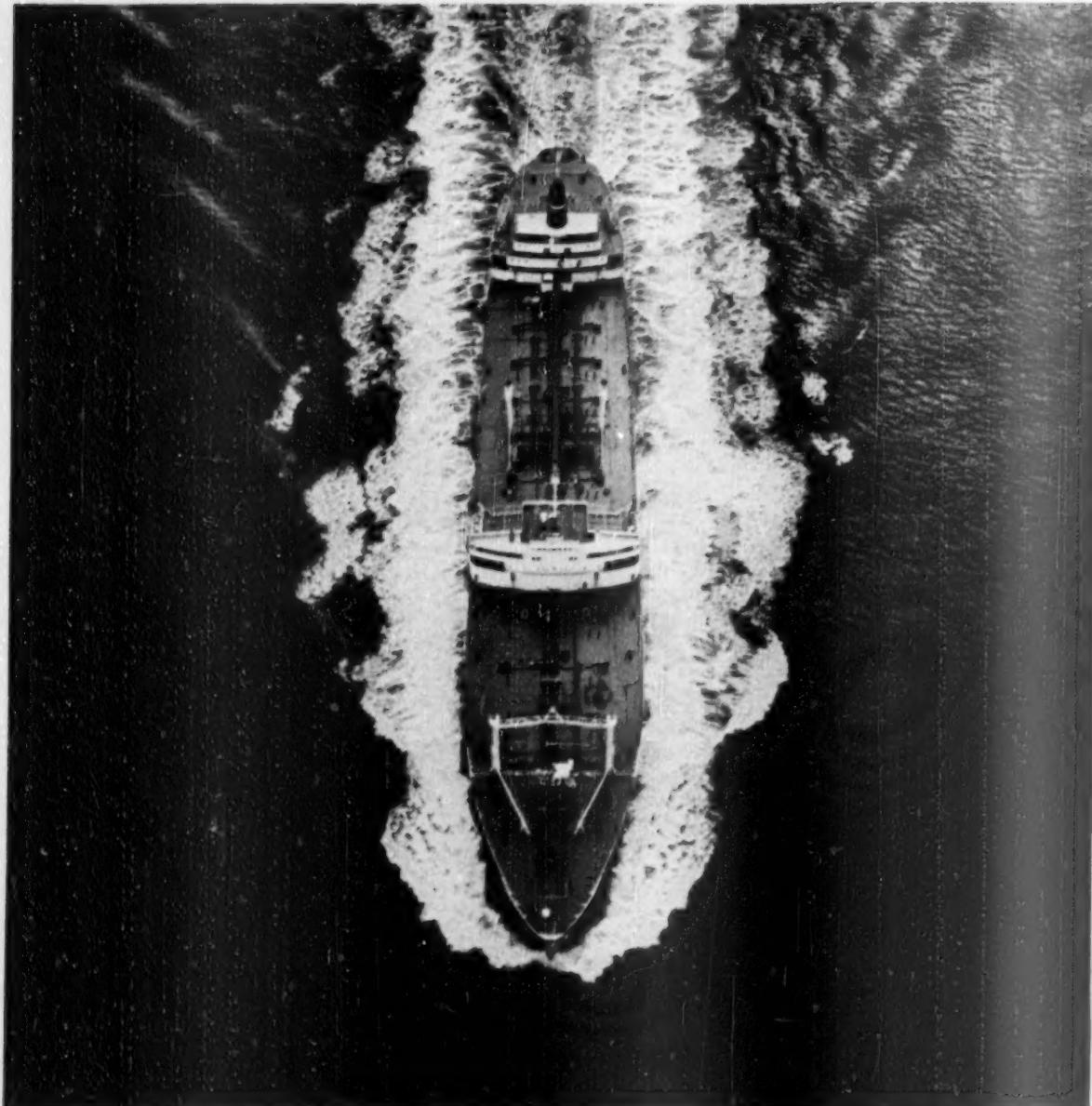
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Queen of the Tankers

She has no swimming pool, no cocktail lounge, but she's a Queen every inch of her 736-foot length, and a fitting claimant to share honors with her glamorous sisters of the passenger fleet. She's the tanker *World Glory*, next to the liner *United States* the largest commercial vessel built in this country.

Above you see her, photographed from the air as she plowed through the North Atlantic during her trials off

Rockland, Me., where she proceeded from Bethlehem Steel's Quincy Yard in Massachusetts after the technicians and ship workers who built her had applied the finishing touches. She embodies the features of advanced tanker design, as developed by the Central Technical Department of Bethlehem's Shipbuilding Division.

The *World Glory* will carry 16½ million gallons of oil — the equivalent of twenty railway trains of one hundred tank cars each, or a 30-mile-long caravan of highway tank trucks. This modern, efficient vessel will provide low-cost transportation of oil between the Persian Gulf and the U.S.A.

BETHLEHEM STEEL



MARKETING

Tariffs Won't Sell Watches

● President's O.K. of boost in duty on Swiss imports fails to excite retailers, now battling a slump.

● Domestic watchmakers see long-term gains and a boost in morale, but look for few immediate benefits.

● Gist of the trade's thinking is—prices will go up some, but not drastically; nobody will gain or lose much.

The domestic watchmakers have won their long, bitter battle for higher tariffs on Swiss watch imports (BW—Jul. 31 '54, p30). Now the question in the trade across the country seems to be: What of it?

Nobody at this stage knows the answer for sure. But these developments seem to be in the cards:

- Because the industry is trying to work out of a slump, drastic price changes are unlikely now.

- But prices will go up—some.

- The cheapest imported lines may fall by the wayside.

- For the long haul, nobody stands to gain—or lose—very much.

• **Rates**—Pres. Eisenhower's O.K. of the Tariff Commission's recommendation means a raise in import duties on watches and watch movements, whether cased or uncased, up to and including 17 jewels, anywhere from \$0.09 to \$1.15 above the former tariffs. This brings the basic tariff up to a range of from \$0.75 to \$2.50. Above 17 jewels, the tariff of \$10.75 stays unchanged. The new rates affect any watches cleared by U.S. customs after Aug. 26.

• **Arguments**—The debate over whether the tariff hike was justified probably never will be won. The majority on the Tariff Commission that put the increases over cited figures such as these: Imports of Swiss movements were up from 2.8-million units a year on the average during the prewar years to 12.3-million units in 1953. Domestic watches accounted for 80% of total watch consumption in this country prewar, only 41% in 1953. On jeweled watches, the U.S. producers fared still worse. Their share of the total jeweled watch market shrank from 60% prewar to 31% last year. Employment in the production of jeweled lever watches plummeted from 10,349 workers in 1948 to 4,242 in April, 1954.

The other side argued that total industry sales have soared from a level of \$35-million to \$40-million prewar up to

\$150-million last year; profits are off, but they show no drastic drop. And any decline in watchmaking employment, the argument ran, was more than offset by the number of workers in watch plants who are employed on defense contracts.

For the time being, though, these arguments are water over the dam. The question now is: Where does the industry go from here?

• **Manufacturers**—Even the big domestic watchmakers—Hamilton Watch Co., Elgin National Watch Co., Waltham Watch Co.—will be penalized somewhat by the new tariffs. Actually, the domestic producers all import some Swiss movements, though the bulk of their product is U.S. made.

Most of the big watchmakers and assemblers believe, however, that the long-term effects will work to the domestic watchmakers' advantage. True, an official of one big company thinks the repercussions will be slight, and all agree that short-term benefits will be small. The main gain right now, a spokesman for Elgin says, is the boost in morale for the companies concerned.

"Now at least we know we're in business," he said. "This gives the American producer a shot at the novelty and highly styled markets. You can expect a lot greater variety in style and design from us from now on."

Naturally, most companies that rely on Swiss imports take a dim view of the tariff rises. These include Benrus Watch Co., Gruen Watch Co., and Longines-Wittnauer Watch Co. "This gives the U.S. producers a tremendous advantage," a Benrus official said. Only Bulova Watch Co., which uses Swiss movements for 75% of its production, believes the new tariffs will help the industry. The rate boosts may cut the volume of sales some, Bulova thinks, but they'll give the \$30-\$40 watch a better chance on the market.

• **Unexcited**—However optimistic or pessimistic the manufacturers may be, the retailers are remarkably unexcited.

In a cross-country check, BUSINESS WEEK found almost as many shades of opinion as there are retailers, but the gist of the thinking was the same: The new tariffs won't help much, but they won't hurt much either.

There are two reasons for the uncertainty and the indifference:

- The question of who is going to pay for the tariff hike hasn't been settled.

- More important, the entire watch industry is engrossed in battling a slump. One estimate has it that dollar sales for the first half of this year are off 40% from the same 1953 period, and unit sales off 20%. Whether a move that tends to up the retail price of watches will cure the situation is the question.

- **Prices**—On who'll pay the piper, most people believe the consumer eventually will. The Swiss users have already begun the upward march in price. Bulova raised prices on its Swiss products \$1 a watch at wholesale; Benrus has raised wholesale prices "slightly," though not enough to offset the full tariff hike. Up to now Benrus is holding the line at the retail end. Nobody so far has raised prices on American-produced watches. But many retailers believe that as the Swiss watch goes up, the American product will sooner or later follow suit.

Everyone has his own ideas on how much that price rise will be. Bulova points out that, strictly speaking, a maximum boost of \$1.15 would take care of the additional tariff. Most retailers doubt the hike will stop there. The assembler will add in the tariff rise when he figures his own markup of around 50%. Then the retailer will figure his markup—usually 100%—on top of that. In all, most retailers must look for increases of around \$2.50 to as high as \$10 in the total retail price.

- **Doubts**—Normally, anyone—except the consumer—would welcome the additional profit as so much gravy. In a soft market, the retailer isn't so sure.

Right now the industry is battling to wear down a peak inventory of some 570,000 units (in 1950, inventories stood at 465,000 units). Some blame the big inventories on the depression-mindedness of the consumer, which has made trouble for other luxury products in recent months. Others, including most manufacturers and some jewelry retailers, say the Swiss watch is the culprit. Cheap Swiss imports, sold at drugstore and other nonjewelry outlets, have put a crimp in sales of the more expensive items, they feel. Big

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department stores, too, have been promoting heavily on inexpensive watches—mainly Swiss.

The result has been something of an orgy of price cutting in recent months. Elgin itself cut its prices 20% last spring. Retailers report they have slashed prices up to 50% on medium and better-priced watches. Some who haven't indulged in price cutting have resorted to another device to lure in customers: the trade-in.

It's likely that the new tariffs will ease this situation some. A price rise will hit cheaper watches the most, may eliminate some of the unwanted competition. This will help stabilize prices at a higher level.

• **Counterweights**—Till the inventories are worn away, though, nobody looks for sharp price hikes. "When business is bad, we'll cut prices," a Birmingham dealer says. Another retailer tells himself comfortingly that the Swiss concerns aren't going to price themselves out of business. There's talk in the trade that the Swiss—who are battling a watch slump of their own right now—may lower their prices, though at least one expert holds this is unlikely. Even when business gets better—and most manufacturers look for improvement this fall—there's always the discount house. Sales of brand-name watches through this type of outlet are increasing. One discount house that sells such watches points out that the jewelry discounter was, in fact, one of the earliest in the whole discount field. With something like a 150% leeway between manufacturers' and retailers' prices, there's room for quite a bit of absorption.

• **Uncertainties**—Weighing the pros and cons, most retailers see not much in the new tariffs for them—and not much for the U.S. manufacturers. Elgin and Hamilton both believe the promotional sales of inexpensive Swiss watches have hurt their own sales. And retailers agree that they will probably sell more U.S. watches as the price gap narrows. But they look for no major swing to domestic watches.

Some retailers think the U.S. manufacturers have been asleep, have let the Swiss grab up a whole new market from under their noses—a market that, at the low end of the scale, presumably couldn't afford a higher-priced watch. Whether the U.S. watchmakers can now regain any of this is a question.

What's more, even with the new tariffs, Swiss watches will still have a price edge, though a smaller one. The recent cut in the federal tax will cancel out somewhat the effect of the tariff hike for people who want the Swiss product. Some retailers say frankly that people like Swiss watches, and even if they have to pay more to get them, they'll do it.

"Trickle Down"— Theory or Semantic Trick?

MANY if not most of the attacks on the omnibus revenue bill describe the measure as a product of the "trickle-down theory." This semantic monstrosity is reminiscent of its counterpart, "pump priming," which gained even wider currency during the 1930's. Both expressions are or were used by spokesmen for the same school of thought—the advocates of governmental hypodermics for the economy. Both are misleading.

What is this "trickle-down theory," so often disparagingly referred to but so rarely stated in broad and intelligible terms? Users of the phrase are not fully agreed on what it means. As far as the tax bill is concerned, Senator Paul H. Douglas and Representative Richard Bolling of the Joint Committee on the Economic Report think the "trickle-down theory" means "to give tax relief to the upper brackets, who will save more, invest more, expand industrial plant, create more jobs, and therefore expand purchasing and consumption." In other words, the "theory" is that such governmentally bestowed prosperity "trickles down" from the "upper brackets."

To other commentators the expression implies tax concessions to business and recipients of business income—categories different from the "upper brackets."

What is the kernel of truth in the much-abused "trickle-down theory"? Just this: Business is not a class or group that can be penalized or exploited for the benefit of other groups. Business is the organized economic life of the people. It is the source of all the necessities, comforts, benefits and satisfactions which are not provided by nature and for which men must work. It is the direct or indirect provider of all incomes, public and private, large and small,

whether in commerce and industry, the arts, professions, philanthropies, or government.

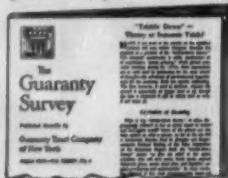
The mainspring that energizes this mechanism is the incentive of profit. In the drive for profit, business creates jobs, absorbs savings, and pays wages, interest, and taxes to support government. When the opportunity for profit is adequate, business activity runs high and these various types of payments are available in large volume.

It is inaccurate and misleading to call this basic principle a "trickle-down theory." In the first place, it is not a theory but a constantly demonstrated fact. In the second place, the flow of incomes originating in and radiating from business is—when conditions are right—not a trickle but a torrent. In the third place, the flow is not "down" any more than it is "up." It might be more aptly described as an emanation or pervasion, a spontaneous distribution of the goods and services produced by the people for their own use, under the spur of profit and subject to the regulatory action of price and competition.

The irony is that neither the "trickle-down theory" nor the "pump-priming theory" is properly applicable to the tax bill against which they have been invoked. The bill was never intended to be an anti-recession device. It was designed to correct manifest defects and inequities in the Federal tax system.

From the August issue of THE GUARANTY SURVEY, monthly review of business and economic conditions published by Guaranty Trust Company of New York.

The complete issue is available on request to our Main Office, 140 Broadway, New York 15, N. Y.



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BRUSSELS

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Six months ago, a TV program starring Techbuilt Homes gave Carl Koch (right) \$2-million of free publicity—and a fast break in the prefab housing field. Whether or not Koch holds his advantage depends on his merchandising program.



Prefabs: Newcomer's Fast Break

Overnight, architect Carl Koch of Boston had a windfall that netted him \$2-million worth of free publicity and a challenge.

The publicity was the television and trade magazine coverage that his new Techbuilt prefabricated homes received; the challenge is the opportunity to expand the national market for prefabricated houses.

The windfall was the result of a strange chain of events. Here's how it happened:

• At the January meeting of the National Assn. of Homebuilders, Koch

announced that he would market his prefabricated Techbuilt house on a national scale.

• In February, television sidewalk superintendents from coast to coast saw Techbuilt blueprints shaped into a finished house on the Ford Foundation's Excursion TV show, whose producers wanted to show how a prefab house is built. Within the next three weeks, Techbuilt, Inc., Koch's operating company in Cambridge, Mass., received approximately 16,000 letters from interested home buyers, and 300 letters from builders who had seen the TV program.

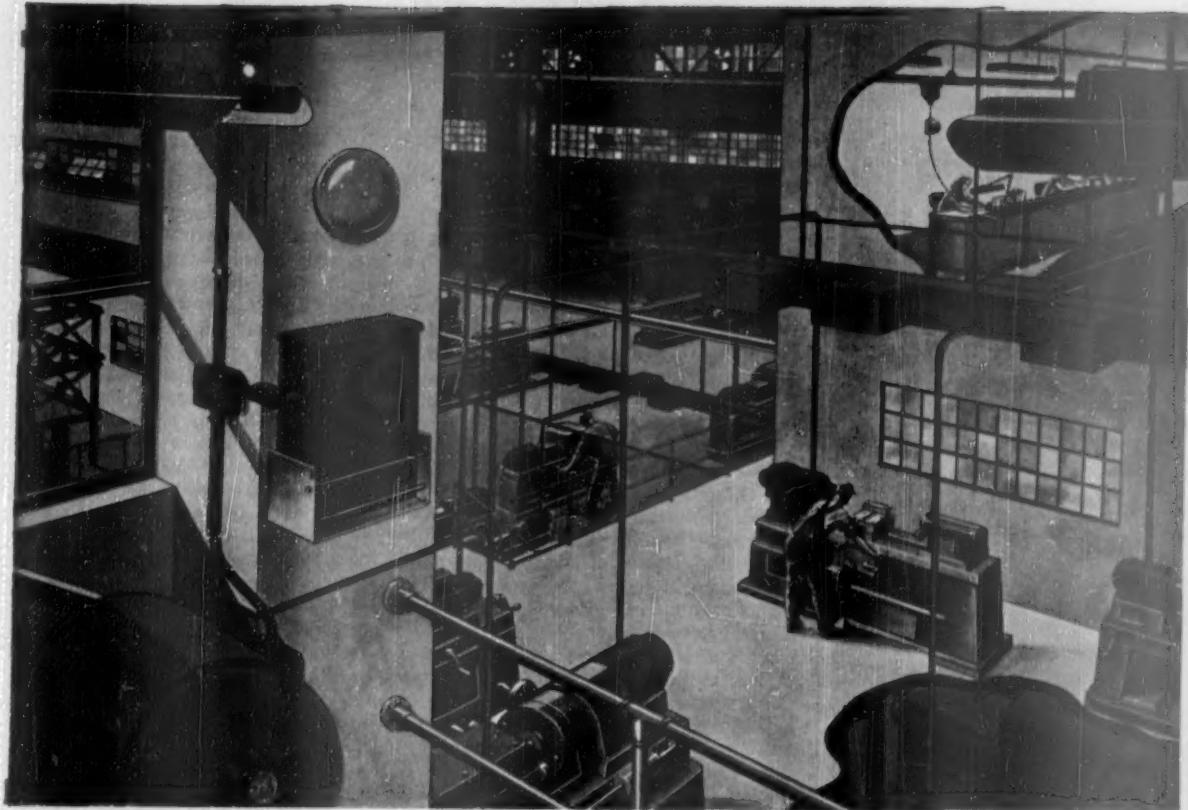
Then trade magazines started featuring Techbuilt homes.

• By May, Koch had signed up some 20 franchised builders in and near New York, Chicago, Detroit, St. Louis, and other major cities.

• Late last month, Aetna Securities Corp. agreed to handle public financing of Koch's new company, Techbuilt Homes, Inc. and all of the first 120,000 stock shares which will be issued around Labor Day are expected to be snapped up at \$2.50 per share. Another 380,000 shares will



TECHBUILT house combines clean, modern lines, and lots of glass with a rustic ranch look; features two stories, no foundation.



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... Koch can withdraw a franchised builder's contract if he doesn't meet specifications . . .

PREFABS starts on p. 78

be issued later. How well the stock issue goes over will be the key to Techbuilt's future.

• **In the Bag**—What has Koch got? With an envious eye on his estimated \$2-million of free publicity, other prefabricators say that Koch's plans for marketing and financing his prefabs are no revolution in the field. Actually, what Koch has done is to take advantage of his breaks to push his Techbuilt homes, with their architectural refinements, onto the market through the latest merchandising methods. And all of this has happened much faster than even Koch expected, with the result that Techbuilt has grown without too much direction. Now Koch and his engineer-partner, Edward Diehl, are busily pulling loose ends together.

For the most part, Techbuilt's marketing problems are inherent in the prefabricated housing business itself—an industry that has yet to conquer problems of public acceptance, restrictive local building codes, and distribution costs (BW-Dec. 12 '53, p70). Many of Koch's answers aren't new, but some are new twists on an established trend.

• **Objectives**—Here are some of Techbuilt's main objectives:

Greater flexibility and adaptability. Techbuilt houses are two-story jobs, with stressed-skin plywood wall panels forming an adjustable shell. The interior can be changed around almost at will, with space for as many as five bedrooms in some models. Idea behind this is that the house can expand along with the family. Rooms can be finished or left with a rustic look.

The middle-price market. Techbuilt houses come in seven basic sizes and styles, ranging in price from \$11,000 for 1,280 sq. ft. of space to \$16,500 for 2,304 sq. ft.

Attractive styling. Koch's experience as a designer (through the Carl Koch & Associates architectural firm) is getting free play. Koch aims at blending clean modernistic lines and lots of glass with a touch of the rustic—such as protruding beams and a ranch-type look.

• **Choice**—Like many other prefabricated houses, you can buy a Techbuilt home one of three ways: (1) completely prefabricated and ready to put up on your lot; (2) semiprefabricated to be finished by a local builder; or (3) via a contract with a local builder to do the whole job. Any combination of these ways can be worked out. Techbuilt will sell blueprints to an independent builder in an

area where it hasn't set up a franchise operation, or to do-it-yourself buyers.

• **Program**—Techbuilt's goal right now is to line up more franchised builders, grant them exclusive area contracts. This way, Techbuilt and its supplier-manufacturers can save money on expensive shipping costs.

Koch is determined to keep his homes quality products. He makes full use of cooperative advertising with basic manufacturers of house parts—doors, windows, floorings, and the like—as well as with big-name appliance firms. Also to insure quality, Koch can withdraw a franchised builder's contract if the builder doesn't use specified materials.

Another feature is Koch's plan for building the houses on ground level, with a 34-ft. concrete base dropped below. This gives a sunken garden effect, and eliminates the need for an expensive foundation, according to Koch. This cost saver is more important in the East than in the Far West where most prefabs are built on ground level.

• **A Pattern**—Other prefabricators are watching Koch's operations with a mixture of disdain and envy. The Prefabricated Home Manufacturers' Institute in Washington, D. C., points out that many of its members have been working along the same lines and toward the same goals. For example, other builders have used public stock financing—Aetna, for example, handled the stock issue for National Homes Corp., about the biggest prefabricator in the business. And Koch, himself, credits National with working to ease local building code restrictions on prefabs. PHMI says the recently liberalized Federal Housing Authority laws will give all prefabricators the chance to "run wild." Prefabricated housing starts were up 21% in June of this year over last, says PHMI, and starts this year are expected to run from 60,000 to 65,000. But this still represents only about 5% of all new starts.

• **The Field**—Thus, Koch's challenge is clearly drawn. He got a fast break into the field on a national scale; now he has to keep ahead of the competition.

So far, Techbuilt has built five homes outside the home Boston area, and 20 more are under construction. The firm is negotiating with insurance companies for a plan to finance purchases of Techbuilt homes nationwide. Ultimately, Koch hopes to operate in every region. As an example, he would like to see 200 builders signed up in the New England area, 10 to 20 around New York City.

Koch has been interested in low-cost housing since 1938. Early in his career he held a traveling fellowship—most of which he spent in Stockholm, studying Swedish "self-help" prefabricated houses. Last week, Koch left for Finland, where he hopes to get a toehold for Techbuilt in the Scandinavian prefabricated market.

Distributors Get Cut Off

Ekco and Philco stop shipping to distributors in price-cutting areas . . . Canned pop makes gains . . . Handbook of liquor statistics appears . . . Report on variety stores . . . Door becomes show window.

Hit by discount houses and price cutting generally, manufacturers of fair-traded appliances and hardgoods have been casting about for effective ways to police their minimum resale pricing policies and contracts. Now two well known brand name companies—Ekco Products Co., Chicago, and Philco Corp.—have come up with one possible solution: Simply stop shipping fair trade items to distributors in areas where price slashing is most prevalent until those outlets sign new and stricter contracts.

Ekco was the first to disenfranchise temporarily all its distributors in the New York City area (BW—Jul. 31 '54, p48). Ekco cut off all shipments of its Flint brand cutlery and mixers. The company is now drawing up new contracts which it hopes will stop so-called "transshipment" of fair trade items to price-cutting retailers.

This week, after running a survey of its New York outlets, Ekco said that it has decided to cut off some distributors permanently and offer its new contracts only to those outlets that are willing to go along with the company's pricing policies.

• **Backer**—At its convention in New York last week, Philco disclosed that it, too, has cut off all its line from all New York distributors while it draws up a new set of contracts. One important feature of the Philco contracts will be a provision whereby the factory can buy back merchandise that has been transshipped to a retail price cutter, and return it to the distributor who sold it—charging the distributor his costs.

Philco Vice-Pres. John Otter said that his company has the backing of most of its distributors and of the department stores that have been hard hit by discounting. He also called on competing manufacturers to join the distributor disenfranchising move.

Canned Pop

The tipoff as to how big a splash cans are making in the soft drink market (BW—May 22 '54, p60) came late last week, when the Glass Containers Manufacturers' Institute, Inc., released a survey. It was designed to show that consumers and dealers prefer their soda pop in bottles—but it actually succeeded in showing how well cans have caught on in a few short months.

The study consisted of interviews with 800 consumers and 209 supermarket managers in and around Philadelphia. That area was chosen because it was one of the first markets where canned soft drinks were introduced last year, and where they have been the subject of "intense promotion," according to Los Angeles researcher Ford Sammis, who ran the survey for GCMI.

Of the 504 men, women, and children who tried soft drinks in cans, 25% switched back to bottles exclusively and 22% are using more bottles than cans, says the survey. But the study also showed that of all the people interviewed, 31% said they would prefer cans, 21% said they had no preference, while 48% voted for bottles—mostly because they thought the drink tasted better and they could see what they were getting.

Dealers chose returnable bottles over cans 43% to 37%, giving more profit as the reason; but 20% said they had no preference. One-way bottles—which, like cans, require no deposit—lost out to cans 32% to 36% among the dealers, while 32% said it didn't make any difference.

• **Concern**—Another clue as to the glass bottlers' concern over the growing use of cans is the recent appearance of full-page ads in West Coast papers, reading "It's clear as crystal . . . Glass bottles will not change the quality of soft drinks . . . the finest soft drinks always come in bottles."

Liquor Tally

You can't keep up with the quick-changing plays and players in the liquor business without a scorecard. At least that's the theory behind Corrado's Handbook of Liquor Marketing—1954, recently published by industry consultant Benjamin W. Corrado.

Over the last 12 years, Corrado says, the national market for distilled beverages can be summed up as "relatively static but literally churning with changing factors." Some of these factors as charted and analyzed in the handbook include: consumer tastes by geographical regions, sales trends for various types of liquor, increased taxes, the bootlegging problem, and advertising techniques.

• **Facts and Figures**—Total liquor con-

sumption last year was just under 195-million gal.—up only 2.3% from 1942 despite a 17% rise in adult population and a 104% boost in disposable income over the same period. And if 1954 consumption doesn't better the first-quarter rate, sales for the year may slip back 5-million gal., Corrado predicts. But competitive opportunities in the field are good, according to Corrado, because of the constantly changing consumer tastes, brand standings, and product variations.

Variety Store Pattern

Operating results of variety store chains for 1953, as analyzed in the Harvard Business School study released last week, show pretty much what everybody had expected. Sales volume figures are soaring along at new records, but rising expenses are taking a heavy toll. Lower taxes are holding net gains and gross margins fairly even, but profit margins are dropping (BW—Jul. 31 '54, p46).

Forty-five chains reported for 1953—representing 88% of all variety chain sales. Of these, 40 that also reported in 1952 showed sales boosts of 1.5%, to a total of \$2.4-billion. That was a new high for the fourth consecutive year. The lifting of price controls and fewer markdowns and stock shortages lifted gross margins by 0.3% to 37.6%.

But increased costs in every category except supplies hiked expense rates to a record total of \$756.1-million.



Door Into Window

When these sliding doors are up, trucks can get into the loading docks at Scruggs Vendervoort Barney's downtown department store in St. Louis. When they're down, the doors double as display windows at eye-level height.

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MARKETING BRIEFS

Gas at the grocery? "It's not just idle speculation," Independent Grocer's Alliance Pres. Don Grimes told the IGA convention in Chicago last week. Grimes said that several IGA stores have tried out the idea, find women like the convenience of gassing up the family car while it's in a supermarket parking lot.

Discount house branches out into department store. That may be a new trend E. J. Korvette kicks off when it adds a full line of apparel and softgoods in its Long Island branch, scheduled to open next winter. Korvette is expected to feature the same low price rates on its softgoods that it does on appliances.

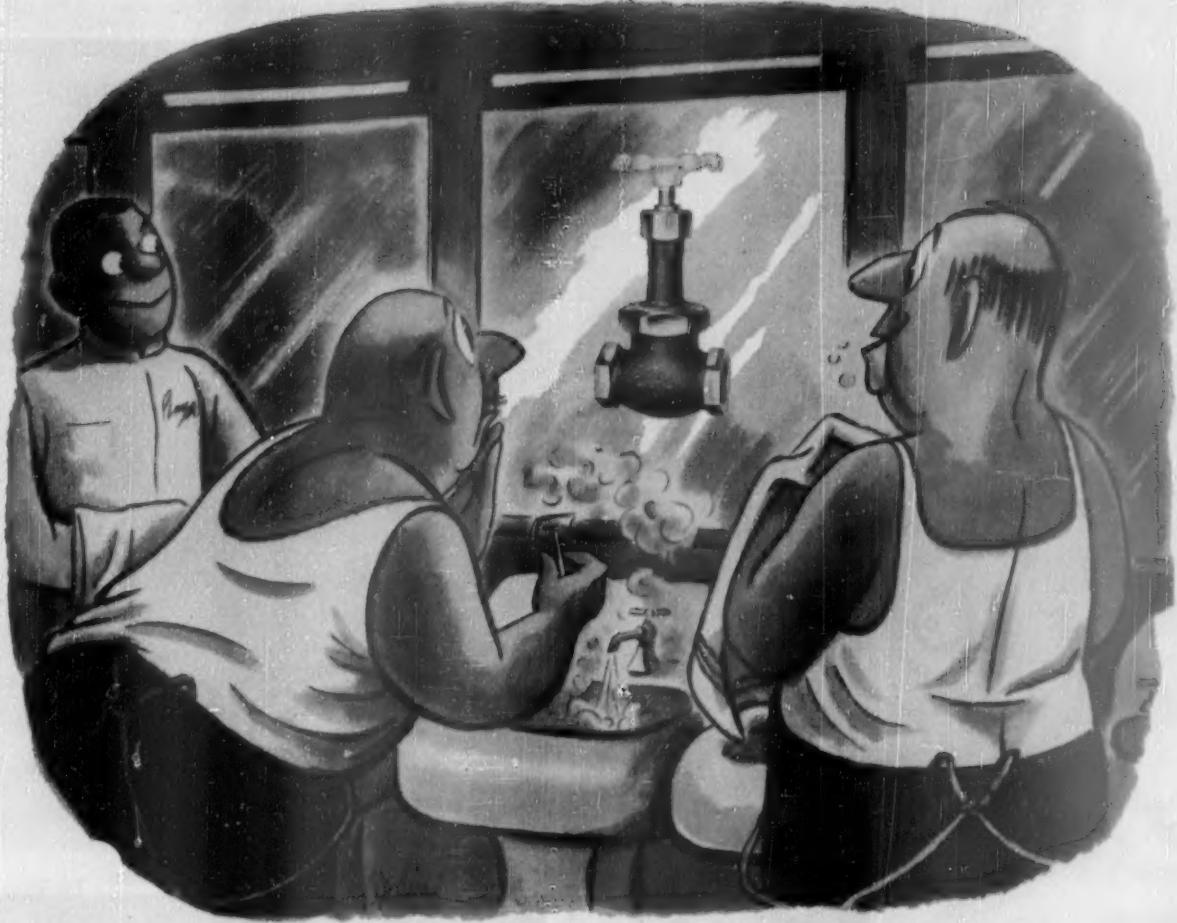
Trading stamps continue to figure in a round of legal actions (BW-Jun.12'54, p58). The Iowa State Supreme Court has ruled unconstitutional a local ban against national stamp company redemption of the coupons for premium merchandise. And Safeway Stores is involved in court battles in Colorado as well as in Oklahoma (BW-Jul.31'45, p48), where pro-trading-stamp groups have sued the chain for cutting prices. Safeway doesn't use stamps, says it had to meet discount competition from retailers who do.

Cigarette ad costs were up 26% last year over 1952, according to a study by the trade magazine Advertising Age. In 1952, it cost 3.09¢ worth of magazine, newspaper, radio, and TV advertising to sell a carton of smokes; last year the advertisers had to spend 3.9¢ to sell the same amount. Unit ad costs, like total sales volume, may have been affected by publicity during the year to health aspects of smoking.

We-do-it-for-you is the latest twist in the do-it-yourself market. A new Store Service Co. in New York City will send out assembly men to put together the pieces of almost any knocked-down merchandise you can buy.

Daytime TV audiences do more listening than watching, according to a recent survey of over 650 New York area homes for station WOR. The study showed that of the people who tuned their sets to morning shows, 59% only listened, while 24% actually watched the programs. Most of the morning viewers were children.

Guinness Stout will no longer be brewed in the U.S. This Irish beer made a sales record last year, but returns on its small, high-cost U.S. brewery weren't enough to make it worthwhile.



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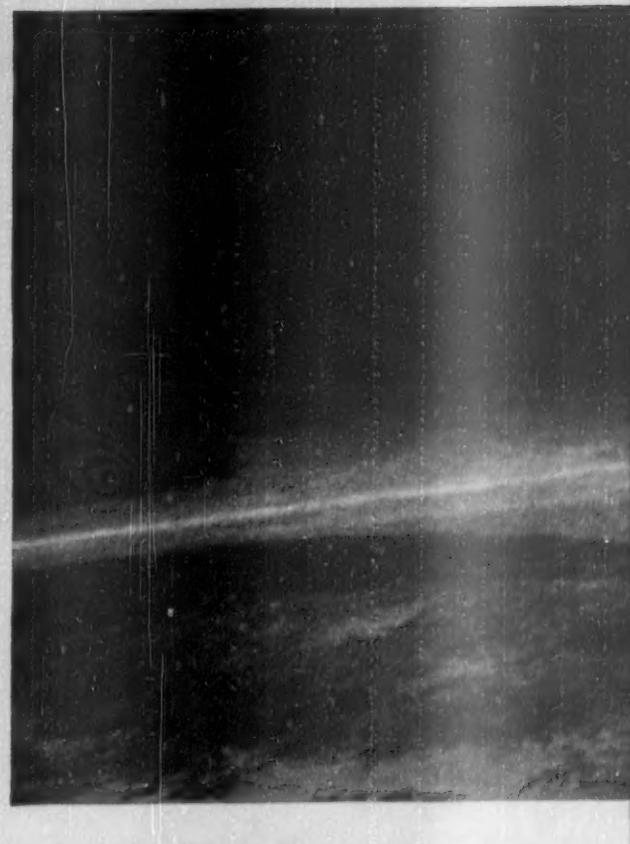


Powell Valves 108th year

INDUSTRIES



BUSINESS MANAGER Billy Goff pulls for the Hopkinsville (Ky.) ball team to win a game, but the prospects are grim. Each loss for the home side discourages attendance, cuts down the take at the concession stands. So Goff can measure a game's loss in dollars.





DEFEAT strikes again, and the Hopkinsville team trudges off the field after its fifth loss in a row. The team's luck changed later, but only after eight straight reverses. By that time a lot of fans had cooled off.

A Baseball Club in Distress

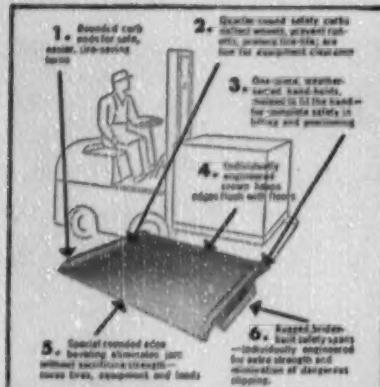


SMALL FRY helps to staff Kentucky Park, home of the Hopkinsville club. At left, a boy perches on a fence to watch for balls hit out of the park. He earns 75¢ a night retrieving balls, which cost the team \$2.40 apiece. In center photo, a lad hawks snowcones (shaved ice with flavoring); he may earn 50¢ a night. At right, boys return cases of empty bottles picked up in the park. They get 5¢ a case.

As these pictures show, minor league baseball can be a cheerless business, both for a team and for its backers. And it is grimmer each year as more teams, more leagues fold up.

Hopkinsville, Ky., illustrates the troubles of minor league baseball. Hopkinsville should be able to support a team in a Class D league, the lowest rung of professional baseball. It's a modestly prosperous city of 18,000, with two banks totaling nearly \$25-million in deposits. It supports a rather luxurious country club, yet it can't turn out an average of 500 patrons for each home game of the baseball team.

Attendance has dropped sharply every year since 1948. Today, the Hopkinsville Hoppers are \$8,000 in the red, with no sign of making it up. For the city, this is a blow to the pocketbook—the team is a community enterprise—as well as to civic pride. It's significant, too, in the over-all baseball scene. For details of Hopkinsville's troubles with a long-established ball team, turn the page.



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See Clues on page 142

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gets a sweeping, really needs full overhaul or replacement. It often breaks down on road trips.

YOU NEED a lot of optimism and an overpowering love of baseball either to play minor league baseball or to manage the finances of a team. At the lowest level—such as Hopkinsville, Ky., in the Class D Kitty League—it's strictly a shoestring operation, and the shoestring is getting frayed.

Billy Goff, a retired grocer with a passion for baseball, says he sank a fortune in the Hopkinsville Hoppers while he owned the team. Now he's the business manager and still has the worries (pictures, pages 84 & 85).

"We used to think Billy was putting on a crying act when he told us his troubles running the club," says John Starnes, owner of a men's clothing shop and treasurer of the Hopkinsville Community Baseball Assn., present owners of the club. "Now we know what he went through."

• **Community Project**—The community association was hastily formed a year ago to rescue the team. Billy Goff had sold the franchise early in the year to a lawyer and a newspaperman from Nashville. By midseason, the new owners had had enough, and they threatened to sell the franchise to another city.

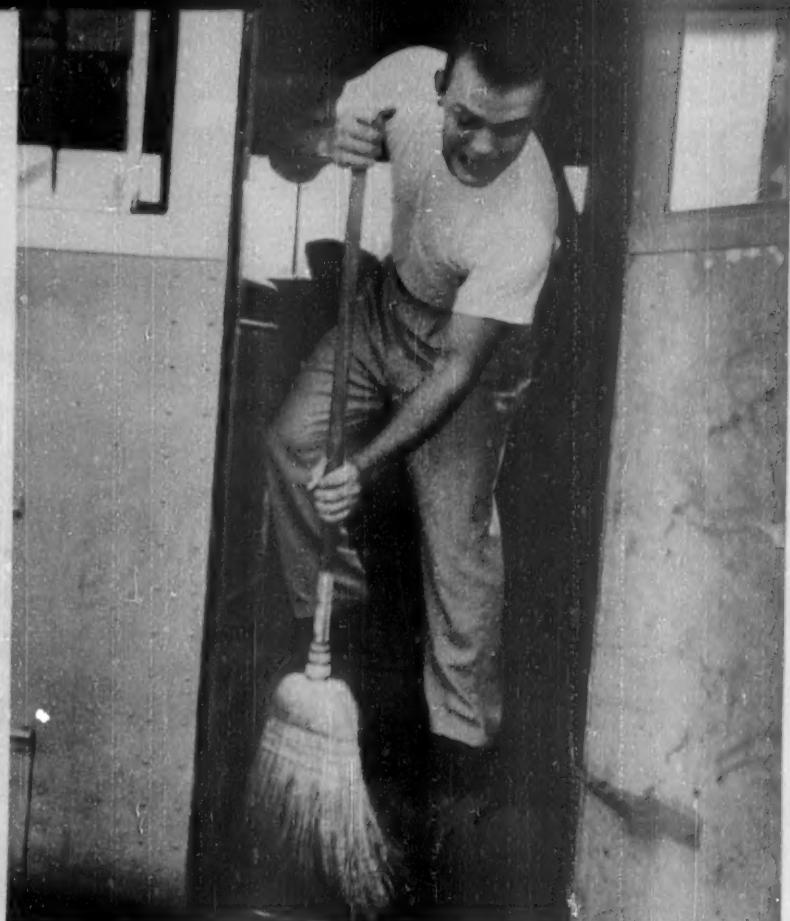
Local people hadn't been supporting

the team with their admission fees, but they rose in arms at the thought of losing it. Besides, Hopkinsville had been the birthplace of the Kitty League, the oldest Class D loop, in 1903. The city cherished the local historic distinction if not the current ball team, and it wanted to remain part of the league.

Community leaders managed to sell \$10,000 worth of \$25 shares in the baseball association. They hired a promotion-minded business manager and made a deal to rent the ball park from Goff, who had retained ownership when he sold the team itself. They made a working agreement with the Philadelphia Athletics, in which the big league club paid \$1,000 for first call on Hopkinsville players. Then they had to post \$1,600 with the Kitty League to forfeit if the team didn't finish the season.

• **Troubles Pile Up**—The 1953 season finished in financial chaos—no one even knows for sure what the season's attendance was. Troubles came early and fast this year, too.

To begin with, the Philadelphia A's, themselves in financial trouble, didn't send all the money or players due the Hopkinsville team. Then the weather was bad in the first weeks; rain canceled several games that can't be made





RARE TREAT is a free meal at Barney Parker's Ritz Cafe for players and friends.



DORMITORY in attic is home to players. On the road, they're even more crowded.

up. On June 9, the new business manager quit to take a better job, and the club called on Goff to fill the breach at \$400 a month.

Worse yet, the team ran into a losing streak that chilled the fans' interest; up to last week, only 150 of the 805 ticket books (20 games for \$10) placed on sale had been sold.

Now the team is out of its slump but, says John Starnes, "We'd be lucky to break even this year." And there's still a backlog of debts.

Attendance figures are revealing. In 1946, the Hoppers drew 56,569 fans as they finished second in the league. Attendance dipped to 37,885 in 1947, but a pennant-winning team drew 51,379 in 1948. After that, the trend was all downward: 31,090 in 1949, 27,491 in 1950, 24,122 in 1951, 21,100 in 1952, and far fewer in 1953. The break-even point is said to be 35,000.

• **Hangover**—Both as owner of the park and as business manager of the club, Goff still has his worries. He leased Kentucky Park to the community association for \$625 a month, but he still hasn't collected any rent this season.

As manager, his chores are varied. He oversees the concessions, which yield almost as much revenue as the box of-

ice; does all the bookkeeping, answers the mail, makes up the payroll, pays off the small boys who help staff the park (pictures, pages 84 & 85), and fills in at the concession stands.

As the pictures above hint, life is rugged for the players, too. Most of them are 17 to 21 years old, hoping to work their way up through baseball's ranks. So they bear with the discomforts of seedy ball parks, shabby dressing rooms, backbreaking rides in an unreliable team bus, pinchpenny accommodations (on the road they get \$2.50 a day for food and incidentals). Salaries run from \$165 to \$250 a month, with Burl Brooks, second baseman, drawing \$400 as playing manager.

• **Cause and Cure**—Reasons for low baseball interest in Hopkinsville are typical of minor league towns: drive-in theaters, television, air-conditioning that keeps people home more, new recreation facilities including Kentucky Lake, a TVA lake 40 mi. from town, with swimming, boating, and fishing.

Unless Hopkinsville can get stronger support from the fans and from major league clubs, Billy Goff sees only one solution: "I'll cut the park into 40 lots and sell 'em for a housing project for \$35,000 or so."



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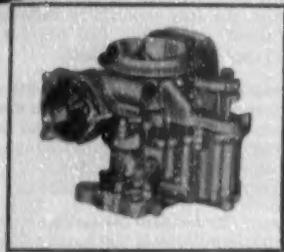
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RAILBIRDS perch behind the dugout at a Midwestern minor league baseball game. Dwindling crowds, rising costs are putting . . .

Bush League Baseball on the Rocks

The plight of the Hopkinsville Hoppers (page 84) is typical, not exceptional, in minor league baseball today. Most of the other 240-odd minor league teams scattered around the country are fighting the same desperate battle for survival.

After the war, some people looked for the same kind of golden age in sports that followed World War I. And attendance did rise at baseball games. In the major leagues, the all-time peak came in 1947; five years later, it was down to prewar levels.

The minor leagues enjoyed the same kind of spurt in the first few years after the war. They expanded like mad to a maximum of 59 leagues and 446 teams in 1949. That year they played to 41-million fans.

The Difference—But this postwar era was far different from the Golden Twenties. This time, for example, there was television. And room air conditioning to make homes pleasanter to stay in. And a boom in motoring, in gardening, in home workshops. All these things made people less dependent on the local movie house, band concert, and baseball team for their entertainment.

After the 1949 attendance peak, the minor leagues felt the reaction. Last year, the number of leagues in the National Assn. of Professional Baseball Leagues was down from 59 to 38. The number of teams had dropped from 446 to 284, and the number of paying customers, from 41-million to 22-million. When the current season opened, two more leagues—with 16 teams—had folded, and another three—with 20 teams—have called it quits since then.

Enemies—What is the trouble? Many minor league officials will growl the answer in a single word: television.

It's hard to argue with their size-up of the situation. Television undoubtedly hurts them when it brings a major league ball game to the living room on the afternoon or evening that a minor league team is playing. Watching big league ball on TV can make a local fan dissatisfied with the brand of ball the home team plays. Besides, TV offers other entertainment that keeps the erstwhile fan at home. It's more than coincidence that baseball attendance skidded after 1949, the first year when TV sets were sold by the millions.

Minor league baseball has other enemies, though:

- The increased orientation of leisure time around the home, the garden, the workshop, the high-fidelity radio-phonograph.

- The shift toward participation sports, away from spectator sports—toward bowling, boating, fishing, golf, tennis and away from baseball, basketball, hockey, football.

- The lure of gambling, which is sternly ruled out of baseball. Two years ago, attendance at horse races exceeded baseball attendance for the first time on record. Last year, 50-million turf fans watched horse races, compared with 37-million for all organized baseball.

- Rising costs, which can't be passed along to the customers for fear of alienating them altogether. Even major league teams are in a money jam, and their shakiness passes down to the lower-ranking leagues. The relatively rich New York Yankees, for example, have cut their support of minor league "farm" clubs from 25 before the war to 10 teams now.

- **Pointing the Finger**—George Trautman, president-treasurer of the National Assn. of Professional Baseball Leagues, agrees with the majority view that TV is the major enemy. But, he

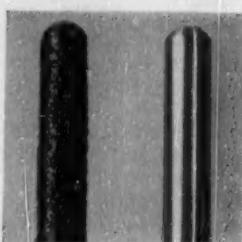


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- High film strength
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". . . major leagues might topple if the minors are allowed to wither away . . ."

BASEBALL starts on p. 90

says, "We'll have to learn to live with it."

It's a hard fact that the big league teams are depending more and more on revenue from TV; last year the Yankees and the Dodgers, World Series opponents, showed a profit only because of TV and radio income.

The major league teams aren't going to cut out TV revenues just because the telecasts are hurting minor league neighbors.

The best that Trautman and the minor league owners have been able to get out of the major leagues is a promise not to telecast into a minor league area during the hours when the minors are having a game. But this promise is often breached.

Trautman is always fighting against what he regards as short-sighted policies of the major league teams toward their minor league affiliates. He points out that half of all minor league teams are "farms" where the major league clubs assign players chiefly to get experience for the big time. It's extremely rare for a major league player never to have seen service in the bush leagues. Trautman argues that the major leagues themselves will topple if they let the system beneath them wither away.

• The System—Trautman's group drafts the rules, gathers and issues information, and arbitrates disputes for all of organized baseball outside the two major leagues. Trautman's minor, or bush, leagues are classified according to the population in their respective areas. The highest—the Pacific Coast League in the "open" class and the AAA leagues—require a minimum population of 3-million in the league cities altogether; the lowest, Class D, requires less than 150,000.

Pay scales are fixed according to each league's classification. In an AAA (Triple A) league, players can be paid \$600 to \$700 a month, though loopholes permit extra pay for a stand-out performer.

In Class D, a player has to be satisfied with about \$165 a month. A player once signed to a contract by any club in organized baseball cannot jump to another club.

A minor league team may be owned by the community, as in Hopkinsville, Ky., by private interests, or by a major league team or higher-ranking minor league team. Ownership by the majors—once the keystone of the farm system—is diminishing; the New York Yankees, for instance, own only two of the 10

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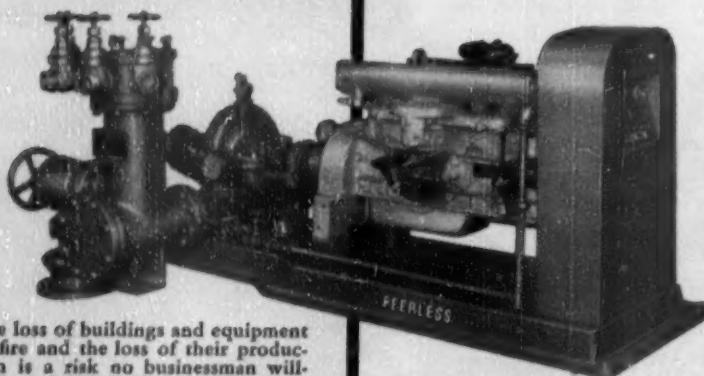
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"...players often take daytime jobs to supplement their income . . ."

BASEBALL starts on p. 90

minor league teams in their farm system.

The growing tendency instead is to have merely a working agreement with a lower-ranking club. The higher team pays the lower team for the privilege of assigning its players there for seasoning and of recalling them later, and also of having first call on players developed by the lower team.

• **A Gripe**—One of Trautman's prime gripes against major league policies has been eased this year. Until this season, the "parent" clubs have had the privilege of optioning 15 players to minor clubs, subject to 24-hour recall. Now these players cannot be recalled after Aug. 1. It has irritated minor league fans when a star pitcher or home-run hitter was suddenly recalled to bolster a parent club, just when the minor league team was in the thick of its own pennant race.

Trautman still thinks the big leagues could do more to keep their minor league affiliates supplied with better players. He says that fans all over the country have become more discriminating about the quality of play since they have seen big league games on television.

• **Cost Squeeze**—Not much can be done, though, about the pinch of operating expenses. Wages are up, equipment costs more, taxes are higher on the ball parks, yet admission fees aren't much higher than before the war.

Ten years ago, Trautman says, a Class D club could operate for \$25,000 to \$30,000 a year. Today, even with a pay scale so low that players often take daytime jobs to supplement their income, a Class D club must lay out \$50,000 to \$75,000 a season.

The rise in costs hurts when revenues are simultaneously dropping. In 1949, a Triple A club in a Midwestern city took in \$230,000 from all sources and paid out \$235,000 in operating expenses. Last year, its attendance was only half as much as in 1949. Its revenues dropped to \$138,000, and its expenses soared to \$300,000. In both years, the parent club in the major leagues bore the losses, charging them off to "player development."

Now, however, the losses are getting bigger, while the parent clubs are themselves in difficulty. As the higher-ranking clubs lose their ability to carry the minors' load, troubles like those of the Hopkinsville Hoppers could multiply, and spread up through the layers of minor leagues toward the top.

Troubles In and Out of Court

A Justice Dept. decree and tougher competition are beginning to change the empire of Wallace & Tiernan, leading manufacturer of chlorinators.

In the more than 40 years since the U.S. towns and cities began treating citizens to chlorine in their drinking water, one company—Wallace & Tiernan, Inc.—has managed to carve itself a throne in the business of supplying chlorinating equipment. This week, for several reasons, it began to look as if the throne might someday turn into an ordinary chair:

• In court, Wallace & Tiernan and the Justice Dept. entered a consent decree that settled one of the oldest antitrust cases in Justice's files. Under its terms, W&T and its subsidiary, Industrial Appliance Corp., are barred from a list of practices that—the government alleged—gave them a monopoly in the domestic sanitary field.

• Out of court, Wallace & Tiernan is running into some of the strongest competition it has seen in years. Mainly, it comes from two companies, one of which has been marketing chlorinating equipment a scant two years.

The civil antitrust suit that the Justice Dept. and W&T put to bed with their consent decree traced back almost eight years—to November, 1946. The charges, which never came to trial, were that Wallace & Tiernan, with the help of others, had built a monopoly in the manufacture and sale of chlorinating equipment. It had done it, said Justice Dept., by buying out competitors, by making exclusive dealing arrangement and agreements not to compete, by patent acquisitions and patent infringement suits, and by inducing purchasing agents to call for bids only from Wallace & Tiernan, and the companies with which it had ties.

• **Monopoly Dimensions**—Justice asserted that by the end of World War II, W&T had succeeded in sewing up more than 95% of all the gas-chlorinating-equipment business in the U.S. Gas chlorinating, which is one of two chlorine-purification methods (the other uses solid hypochlorites), is far and away the most common process today for large-scale treatment of water, sewage, and industrial wastes. The chlorinator—the machine that put Wallace & Tiernan in business in 1913—operates by feeding chlorine gas into solution with water, then into a flow of whatever liquid is being disinfected.

All told, at the time of the suit, Justice Dept. calculated the total domestic market for chlorinating equipment in the sanitary field at something less than \$15-million a year. Of this, it gave

Wallace & Tiernan a share of better than \$14-million. Only two other companies—Everson Mfg. Co., of Chicago, and Chemical Equipment Co. of California—were then making gas chlorinators.

• **Decree Provisions**—That was the picture in 1946. To say that it has changed radically since would be an admission of poor eyesight. But it has changed some, and the consent decree may alter it more.

Under the decree, the practices that Justice Dept. charged as fostering a W&T monopoly are outlawed. In addition, Wallace & Tiernan and Industrial Appliance are ordered to make some 21 equipment patents available to competitors on a royalty-free basis. The decree forbids W&T to acquire any competing chlorinating equipment maker, and bars it from prosecuting patent suits based on alleged infringements that took place before the settlement of the case.

On top of this, W&T is to pay fines—under a companion criminal suit that it did not contest—amounting to \$45,000.

• **Effects**—The precise effects of this settlement are impossible to calculate at the moment. Wallace & Tiernan itself sees relatively minor repercussions. Its competitors hope for something more.

W&T Pres. Frederick G. Merckel concedes that the decree will make company operations "more circumscribed, more complicated." But he sees no "over-all effect on the volume of business we will write."

Exactly what the volume is today, Merckel won't say—beyond putting the total market at "a moderate seven figures, and our share a slightly more moderate seven figures." (W&T gross last year came to \$38.6-million, more than half of which was from the sale of chemical products having nothing to do with chlorination.) Merckel sees no black eye from the settlement, feels sure customer ties won't be affected because "we have the experience and service, and in this business, that's what counts."

• **Competition**—W&T's competitors—there are now four with gas chlorinating lines: Everson, Chemical Equipment Co., B-I-F Industries, Inc., and Fischer & Porter Co.—aren't so sure that Merckel is right. At least, they hope he isn't. And it's no exaggeration to say that the worst that

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Be Sure To See The

**BUSINESS SERVICES
SECTION
of
"clues"—page 142**

could happen to Wallace & Tiernan's business would be just fine with most of them.

There is just one word to sum up the competition's feelings about Wallace & Tiernan—bitterness.

This is pretty much the feeling, for instance, of Fischer & Porter, which says its share of the market, in dollars, is now about 12%.

On that basis, Fischer & Porter this year expects to do a business of about \$1-million in chlorinating equipment (out of a total company sales of an estimated \$8-million). Next year, it expects a jump to \$3-million and an ultimate potential of three or four times that. Although Kermit Fischer, president of the company, sees the consent decree as helping reach those goals, he doesn't feel it offers any magic formula. "You have to remember," he says, "that the waterworks field is a conservative one. It takes a long time to convince people that something new can be something better. That's what we've been fighting to do for two years now, since we came out with our machines."

• **Second Entrant**—B-I-F Industries, which changed its name from Builders Iron Foundry Co. last year, is the second company to bring out a gas-chlorinating line since the war. It's known that Wallace & Tiernan figures it, along with Fischer and Porter, as a vigorous, well-equipped competitor.

Builders, whose main business is metering equipment, has actually been in chlorination for many years, but most of the time in the hypochlorites. In fact, Builders was one of the defendants in the Justice Dept. suit, charged with an agreement to divide the market with W&T. (The civil charges against Builders are still pending.)

Builders' Pres. Earl H. Bradley is cautious in appraising the possible effects of the W&T consent settlement. "To the extent that they abandon practices that they agree to," Bradley says, "it's obvious that competition will be eased." Just how much easing there will be, what his own sales are right now, or what he expects them to be, Bradley won't say.

• **Other Adversaries**—The other two companies in the field—Everson and Chemco—are the oldest competitors. Roy Everson himself is generally credited with being the one who stirred the Justice Dept. into bringing its suit in the first place. Everson's share of the market, however, is minute, by its own admission. Chemco, which is headed by John Mudge, has been in business since 1925, specializes in a vacuum-type chlorinator for the swimming-pool trade. Mudge says he has spent \$1-million fighting W&T and has taken a "terrific mauling" doing it.

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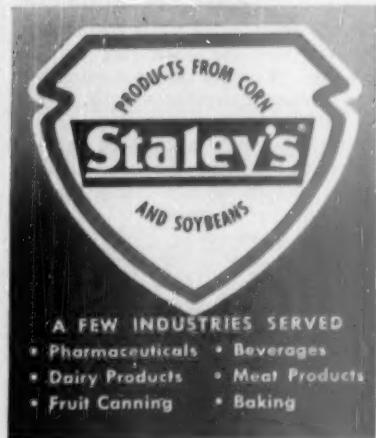
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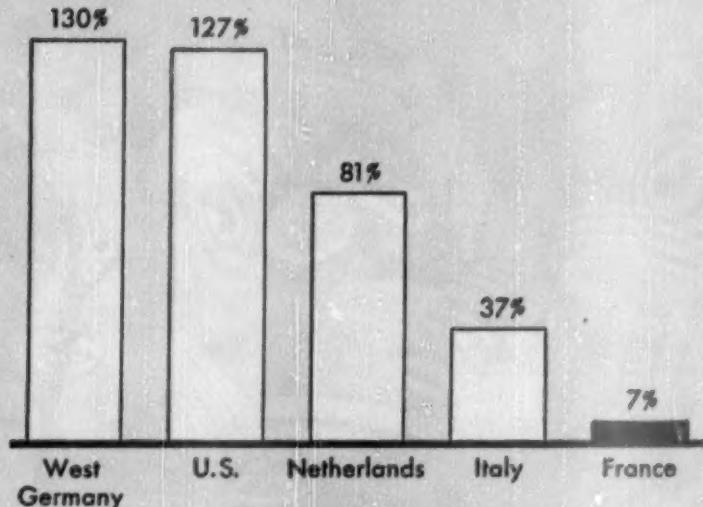
BUSINESS ABROAD



Premier Mendes-France is off to a flying start on his toughest job yet—to make Frenchmen change the ways that have brought them to an economic standstill.

Stagnation in Production...

Since 1929, French industrial production has hardly grown at all



Mendes-France: Starting an

Premier Pierre Mendes-France is set to begin his overhaul of the stagnant French economy. On Tuesday, he received a resounding vote of confidence from the National Assembly—plus full powers to implement his program by decree through March of next year.

French economic ills are deep-seated, as the chart above indicates. The cure will be a slow, agonizing process at best; there will be none of the sudden and spectacular that marked the settlement in Geneva or the weekend flight to North Africa with an offer of self-government to Tunisia.

But in their implications for France, Mendes' economic plans are no less dramatic. What he proposes, in effect, is an economic revolution. It is the core of Mendes' hopes for his country. Without thorough reforms, he believes France will remain the sick man of Europe, despite all the external palliatives that can be applied.

• **Challenge**—Mendes' plan for the French economy is complex, and still somewhat vague. He has not yet revealed a step-by-step outline of what he wants to do. What he has revealed is a doctrine—a determination to remake France so it can compete and prosper in a 20th Century world, free of the U.S. dole and without the crutches of

trade barriers, subsidies, and cartels. Businessmen must come out of their shells and compete; French farmers must change their age-old ways; workers must produce more efficiently.

To the French people, it's a frightening challenge. The Mendes government could come a cropper over its economic reforms. Or it might lose office over its conduct of foreign affairs, and never get to see the economic program through. But Mendes has served notice that if he stays, France had better get ready for a housecleaning.

I. Long Road Ahead

Mendes can take some hope by comparing France today and last August. Just a year ago this week, millions of sullen workers threw France into the chaos of a general strike (BW—Aug. 22 '53, p30). A revolutionary mood took hold and, while Frenchmen weren't entirely sure what they were striking for, they knew they were fed up and wanted a change.

That dangerous state of mind still exists today. But it has been submerged for the time being. Frenchmen are electrified by the appearance of a strong leader, unique to France, who is not a man on horseback but an intel-

lectual whose greatest interests are economic. The vote of confidence, and the temper of the country, are pretty good signs that France is willing to give him a chance.

• **Not Acute, but Chronic**—You can't avoid comparing the atmosphere in Paris today with Washington of the early New Deal. Mendes himself is a great admirer of the New Deal, and of the U.S.; his advisers remind one of the bright young men who flocked to Washington in 1933. But there can be no Hundred Days of sweeping changes in France.

The troubles of the French economy aren't so urgent and obvious as those of this country in 1933. There is no sudden breakdown of credit, employment, and production. France, superficially at least, is better off than it was a year or two ago. The problem, rather, is one of decay and paralysis. The paradoxes and anachronisms of the economy are deeply imbedded in the warp and woof of French life. Mendes must meticulously unravel generations of habit. And Frenchmen are notoriously set in their ways.

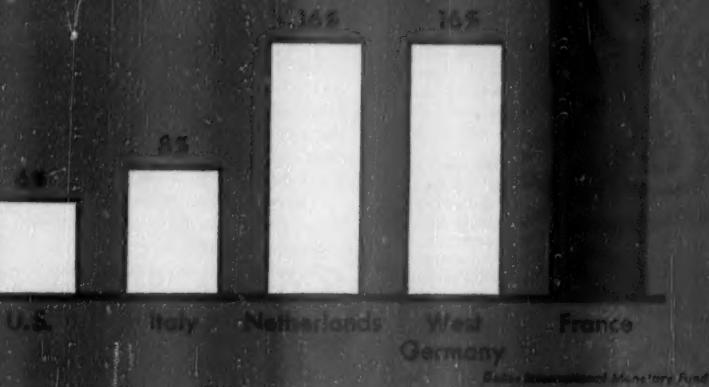
II. Illusions and Realities

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Economic Revolution

Europe is no neatly balanced between industry and agriculture; none is so nearly self-sufficient. This summer, the French economy even gives an illusion of better health. Prices have been stable for many months, production shows an uptrend, there's little unemployment, the French gold and dollar reserves have grown.

* Below the Surface—Probe deeper, however, and the illusion vanishes. The chart above shows French industrial production stagnating just a few percentage points above 1929; the same goes for national income and real wages. And while French prices have stabilized, they have frozen far above prices in other countries. A French typewriter, for example, costs 60% more than an Italian machine, 100% more than a German typewriter.

Hard currency reserves are the result of "extraordinary dollar receipts"—U.S. aid for Indo-China, offshore procurement in France, soldier spending in France and North Africa. Mendes can't count on increasing dollar help; rather, he must expect a decline.

* Maginot Lines—Behind the paradox of France is the French way of doing things. Frenchmen, though gifted and industrious, refuse to take risks. They've never put themselves to the job of in-

creasing the size of the total national income. Instead, they devote their energies to protecting what they've got. The result is a rigid economy in which every businessman, farmer, and worker tries to surround himself with cast-iron guarantees against competition, lower prices and wages, technological change.

That is why economic reform, rather than foreign policy, will be the toughest of the tasks Mendes has set for himself. Any thorough housecleaning in France will hit the pocketbook—especially those well-guarded purses of the world's most conservative people—the French peasants, the small industrialists, the petit bourgeois storeowners. These are the very heart of France. France is more a nation of shopkeepers than England ever was.

III. Lines of Attack

Mendes understands this. And that is why he plans to move gradually, and why the measures he must take—even in the broad outlines so far disclosed—hardly seem exciting stuff. Last week, he told the National Assembly: "It is a long and exacting labor we are starting. I excuse the modesty of the measures that we will take this year, but a program such as we have conceived can



and their fuel costs
are DOWN... 49%

Off to the pokey he goes. The BTU Burglar was caught red-handed stealing billions of BTU's of costly heat. But now that he's been arrested they're saving a cool 49% on fuel.

This forge furnace—which is cited because it's a typical example—had always had heavy firebrick as a lining. But the last time relining was necessary, it was decided to try lightweight B&W Insulating Firebrick. Result: Annual fuel cost went down 49%—a saving of \$4,800, and this, mind you, was in just one furnace.

Heavy furnace linings waste your fuel dollars two ways: They soak up and hold large quantities of heat which are lost when the furnace is cooled; and they conduct and lose too much heat through the walls. Lightweight insulating firebrick, containing millions of tiny air cells, heat up and cool quickly, absorbing and storing very little heat. Also, they resist heat flow, keeping it inside the furnace to do productive work.

The lighter the brick (and the lightest of all are B&W Insulating Firebrick), the more you save on fuel.

What easier way could there be to cut a major cost? You and those responsible for furnace operations in your plant will find it well worth while to talk it over with the local B&W Refractories Engineer. Or, write to B&W today for further information.

BABCOCK & WILCOX
THE BABCOCK & WILCOX CO.
REFRACTORIES DIVISION
GENERAL OFFICES: 101 EAST 42nd ST., NEW YORK 17, N.Y.
WORKS: AUGUSTA, GA.

R-505



"A salute to those
who made it possible" *

**IF YOU BUILD
WITH THIS**
**YOU WILL
NEVER NEED THIS**



You will never need to disrupt your business for electrical alterations. Never need to pay for expensive labor to tear up your floors. Not if you plan your building with Fenestra-Nepco Electrifloor* in mind!

You can save your building from electrical obsolescence. New outlets can be installed *any time* . . . in *any* or *every* square foot of floor space . . . in a matter of minutes!

You can cut your building cost . . . in one job, 1,000 tons of structural steel were saved because of Electrifloor's combination of great strength with light weight. Foundation costs were also cut.

You can save building time and see your

investment pay off faster . . . in a rush job, Electrifloor saved 6 months' building time—as many as 7 floors went in at once. As soon as a few of the cellular floor panels were laid and interlocked, they served as material storage space and working platform.

Fenestra-Nepco Electrifloor was developed jointly by Fenestra* (Detroit Steel Products Company) and Nepco (National Electric Products Corporation)—two great names in the construction field.

If you want to protect your building investment, write to Detroit Steel Products Company, Dept. BW-8, 3425 Griffin Street, Detroit 11, Michigan.

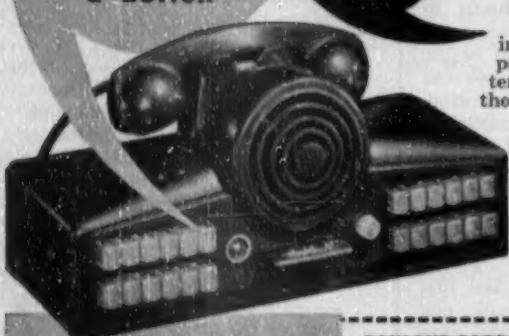
*Trademark

**Fenestra
Nepco** | **ELECTRIFLOOR**

this time-study saves you money!

you save
16 seconds every
time you press
a button

BUSINESSES
SAVE HOURS
EACH DAY



Actual time studies taken in hundreds of businesses show that an average of 18 seconds is required to make an "inside" speech contact through the switchboard. With AMPICALL—your own "clear line" internal communication system—you get 2-second speech contact within and between departments. AMPICALL frees busy switchboards for important outside calls—keeps personnel on the job, keeps talk terse—saves hours each day for the average business. AMPICALL saves you money—pays for itself. There is a system to fit your special needs. Get the full facts today!

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only be applied progressively, with great caution, and its execution must extend over a long period."

The basis for the program is the broad legislation giving the government power to issue decrees with the force of law through March, 1955. Here is how Mendes' ideas, and the probable lines of attack, shape up:

Industry. French prices are out of line with world prices mainly because of the great spread between the strong producer and the marginal one. Businessmen have banded together to protect their inefficient brethren; to let him go under would seem antisocial in France. Government policy, with its maze of subsidies and controls, has tended to buttress the system.

Rigidity of French business breeds inequities, even though it's supposed to keep all things equal. Some strong businesses get fat on subsidies; smaller ones just skirt by; the worker gets the short end of the stick.

There's little thought of competition. Every business wants its own safe market with high unit prices and a low volume of output. Frenchmen, by and large, believe the size of the market is fixed by immutable law, and there's no use tampering with it.

Mendes would try a gradual infusion of competition by a selective cutting away of import barriers and subsidies. He speaks of a "readaptation of enterprises": He is prepared to indemnify individual firms for the costs of merging, changing their product, or for folding altogether. He would indemnify employees of such firms, retrain them, relocate them. Some of the more efficient industries, especially those with export possibilities, would get funds to expand and modernize.

Agriculture. It will be difficult to convince French farmers to give up some of their crutches, to shift production away from old standbys such as wine and sugar beets and into, say, corn, oilseeds, livestock. Like industry, French farming has grown in a hot-house of protection and price supports. Many more people than are economically justified have remained on the farm. Some farmers, who have played their crops right and have good land, enjoy swollen incomes; others have but a bare subsistence. Prices are impossibly high.

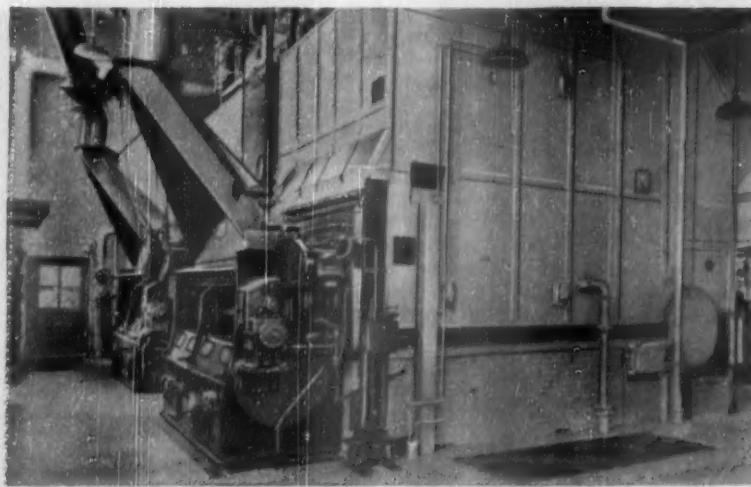
As a starter, Mendes this year may be able to begin the process of encouraging crop rotation and consolidating a few of the uneconomic smallholdings that dot the French countryside, especially in the South. He may have a rearranged set of subsidies to foster a larger agricultural contribution to French foreign trade. Again, he expects slow going.

Wages and labor. Mendes insists that the French wage system needs flexibility above all. The French system of

"COAL'S BEST FOR OUR MODERN PLANT!"

**It's low in cost...
It's clean and convenient!"**

**says G. W. Peters, Engineering Manager
M&R DIETETIC LABORATORIES, INC.
makers of PREAM & SIMILAC**



"We made a careful study of fuels and burning equipment before building our modern new plant in Sturgis, Michigan. This plant was designed to produce baby food. So the steam plant has to be clean and dust-free as well as economical to operate. Also, we wanted a fuel we could store safely and easily in order to insure ourselves against any shortages.

"We decided on bituminous coal—and the up-to-date installation shown here. It certainly fills the bill on every count. Our modern combustion equipment makes coal far more economical than any other fuel. Up-to-date coal and ash handling give us convenient operation completely free of dust nuisance."

Additional case histories, showing how other types of plants have saved money by burning coal the modern way, are available upon request.

Discover for yourself the great advantages of coal burned the modern way. Call in a consulting engineer. He'll show you how today's combustion equipment can give you 10% to 40% more power from a ton of bituminous coal than from equipment used only a few years ago. He'll show you how modern labor-saving coal and ash-handling equipment make a coal-fired installation clean, convenient, and dust-free.

If you plan to remodel or build a new plant, be sure to look into the low cost and convenience of bituminous coal. Consider coal's other advantages, too. It has reserves that are virtually inexhaustible. America's bituminous coal mining industry is the most efficient and productive in the world. With bituminous coal, you can be sure of plenty of fuel at relatively stable prices now and for years to come.

If you operate a steam plant, you can't afford to ignore these facts!

- BITUMINOUS COAL** in most places is today's lowest-cost fuel, and coal reserves in America are adequate for hundreds of years to come.
- COAL** production in the U.S.A. is highly mechanized and by far the most efficient in the world.
- COAL** prices will therefore remain the most stable of all fuels.
- COAL** is the safest fuel to store and use.
- COAL** is the fuel that industry counts on more and more—for with modern combustion and handling equipment, the inherent advantages of well-prepared coal net even bigger savings.

BITUMINOUS COAL INSTITUTE

A Department of National Coal Association
Southern Building, Washington 5, D. C.

FOR HIGH EFFICIENCY & FOR LOW COST
YOU CAN COUNT ON COAL!

business keeps prices as high and wages as low as the traffic will bear. Fundamentally, Mendes wants to tie wages to productivity. The plan could mean a wage-board setup that would in effect throw the government on the side of labor in a request for higher wages in an individual plant with high productivity.

The government will undertake careful studies and measurements of overall productivity. These would be the basis for changes in the basic minimum wage. But the emphasis is on flexibility rather than fixed figures. A minimum wage would be only a floor, rather than the keystone of a ponderous superstructure of fixed wage rates for entire industries and regions.

You may get a hint of the wage policy in October: There are rumors of a general upward adjustment then. There will surely be at least small adjustments, such as modest increases for France's pitifully underpaid civil servants. And there will be important indirect efforts to improve the lot of the French worker. High on Mendes' list is a promise to put steam behind France's lagging housing construction, to the limit of the government's ability to finance it.

Taxes. It looks as if a revamped fiscal program will be put off until the next budget, at the end of the year. There are hints that Mendes will attempt to reduce the dependence on payroll taxes, to ease the inequities of the corporate income tax. And while tax evasion is a big problem, it's not so important as the privileged treatment that some groups of taxpayers—such as shopkeepers and small businessmen—have been able to build up, while the working man carries the largest burden.

Foreign trade. France's internal problems reflect themselves in foreign trade—high prices hobble French exports and are a primary reason for a perennial payments deficit. High import barriers are one of the most cherished props of inefficient industries in France.

Mendes' long-run hope is to dismantle the system of import quotas, tariffs, and export subsidies where he can. But again it means slow going, and frequent use of just those mechanisms that he wants to discard. Exports must be expanded, and that means maintaining many export subsidies (tax rebates, usually) aimed at making French products competitive. The effort will be to make these mechanisms more selective, and government will try to encourage new exports.

Exporters themselves will be urged to join in groups to go after foreign markets, depend less on the easy, protected markets of overseas France. There's a hint of expanded East-West trade in Mendes' planning. And you can't rule out an eventual devaluation of the franc.

Hassle Over Japanese Trade

Cuban sugar and textile industries nearly torpedo Havana-Tokyo trade pact . . . Britain girds for commercial TV . . . Nine nations may liberalize foreign investment legislation . . . Money prices soar in Brazil.

Japan must find markets in the free world if it's to stay clear of the Communist orbit. How to help Japan find those markets haunts U.S. policymakers. When Japanese salesmen get a foot in a trade door, trouble is apt to break loose among the businessmen inside.

A bitter scuffle over Japanese imports has just ended between two platoons of Cuban businessmen: the billion-dollar sugar industry vs. the much smaller textile association. As of last week, the textile people had apparently won.

• **Quid Pro Quo**—Trouble arose with negotiations for a Havana-Tokyo trade pact. Japan, usually Cuba's third largest customer, insisted this time on a look-in to the Cuban textile market as a quid pro quo. Cold logic seemed to make the deal a must for Cubans. Sugar amounts to 90% of their exports, provides half the national income. And this year Cubans face a dangerous world sugar glut.

The small (\$20-million), highly protected textile industry would have none of it—it claimed it could not compete with Japan's low-paid textile workers. Bad public relations on the part of the sugar barons compounded the argument: When the textile association first complained about the projected agreement, the sugar men referred scathingly to the "parasite industries" that were hampering Cuba's key export. That brought every fledgling business on the island to the textile group's side. They maintained that Japan would have to buy Cuban sugar anyway—trade treaty or no trade treaty.

The textile industry won a stalemate—trade talks have been suspended. Now the government is trying to wheedle some concessions on Japanese goods out of the textile men in order to avoid a complete breakdown with Tokyo.

• **Repercussions**—American observers in Havana think they see the shadow of things to come elsewhere in the world, when the Eisenhower Administration goes ahead with its plan to grant broad tariff concessions to Japan, and to persuade other Western nations to do the same within the framework of the General Agreement on Tariffs & Trade (GATT) (BW-Jun.19'54, p146).

Nonetheless, the U.S. is determined to tackle the Japanese trade problem head-on, and is prepared to make concessions to third countries if they'll take more goods from Japan. Japan's rapidly

worsening economic plight has alarmed the White House, and all government departments have a top-priority assignment to see how Japanese trade can be built up fast.



SIR KENNETH CLARK

British TV

With the bitter parliamentary battle over the introduction of commercial television now finished, Britons are getting ready for their first look at sponsored programs. But Sir Kenneth Clark (above), Britain's TV czar, has promised the programs will look little like those shown over U.S. networks. Last week, Clark called the first meeting of his nine-man Independent Television Authority to map out plans for keeping a tight rein on commercialism.

Sir Kenneth is chairman of Britain's Arts Council and a former director of the National Gallery. Other members of the TV panel include Margaret Popham, former principal of Cheltenham Ladies College; Lord Aberdare, chairman of the National Assn. of Boys Clubs; Dilys Powell, a woman film critic for the London Times; and C. B. Thorneycroft, former general secretary of the Transport Salaried Staff Assn. of Britain's Civil Service. None of the ITA members has had much experience in the TV field, a fact openly acknowledged by Clark.

Clark hopes to get commercial TV under way within a year. His idea is to build a transmission station and several studios, then let program companies bid for the use of these facilities. The program companies will get their money by selling air time to advertisers. Early guesses are that first sponsors will be found among soap and food companies.

Wooing the Dollar

Private U.S. capital begins to look more attractive abroad now that public loans and aid money are tapering off.

Nine nations—Italy, Afghanistan, Formosa, Korea, Paraguay, Austria, the Philippines, Iran, Egypt—plan to overhaul their investment legislation in hopes of luring dollars. Washington hopes the liberal Turkish legislation will be the yardstick. Turkey's "model" law ties no formal strings to foreign investments, leaves the terms of each up to a special investment commission.

Barriers to capital flow are under attack in Monte Carlo, too. The International Bar Assn., meeting there, is trying to draft a universal foreign investment statute to present to governments around the world. Again, Turkey's law is the model.

There's this bit of encouragement for the foreign investor in India: The ruling Congress Party has made an important policy statement, backed by the prestige of Prime Minister Nehru, opposing nationalization of private industry.

High-Cost Money

Brazilians never were much for putting their spare cruzeiros into bank accounts. Now, with a tightening money market in Brazil, banks are fighting desperately for depositors. Some use special gimmicks: One generally conservative bank not only offers fat interest rates but throws in a life-insurance policy to boot.

Interest rates vary all over the lot, especially now that there's no legal limit for interest rates on deposits. The larger conservative and foreign banks pay 3% on current accounts, others pay 5% or 6%. For time deposits, the rate soars as high as 9%.

But even these high prices look thin alongside other rates for money in Brazil these days:

Preferred stock	20%
Common stock	18%
Sao Paulo "rotating bonds"	16.5%
National Treasury Bills	15.5%
Mortgages	12%
Rediscounts	8%

The legal interest ceiling for bank loans is 12%. But in the face of unrestrained interest rates for depositors

Cuts Car Loading Time In Half



Modern Mechanization has slashed handling costs for the Phillips Auto Wrecking Co. of St. Cloud, Minnesota. Their new, efficient American 375 crawler crane has cut car loading time in half and has increased production throughout the entire yard.

Industry 'Scraps' to keep in black

Scrap metal has become "big business"—a far cry from the day when small collectors plied their trade from alley to alley. And, like other industries in our economic fabric, the scrap dealer has had to mechanize his methods to keep costs down and profits up.

Whether the market for scrap is up or down, the dealer has to continue his handling and processing. Progressive dealers like the Phillips Co. have discovered that by modernizing with efficient equipment like the American crane they can make out better on both the high and low markets.

In scrap yards . . . and on projects across the nation . . . American products are stepping up production and cutting costs for owners. Many of these projects are described in factual, on-the-job stories in the American Crosby Clipper. If your business is such that these stories are of interest to you, mail the coupon below. You will receive the Crosby Clipper regularly without charge.



American Hoist and DERRICK COMPANY

American Hoist & Derrick Company
St. Paul 1, Minnesota

Yes, I'd like to get the American CROSBY CLIPPER.
Also, send information on the following equipment:
— Hoists — Steel Derricks — Cranes — Portable Elevators
— Genuine Crosby Wire Rope Clips

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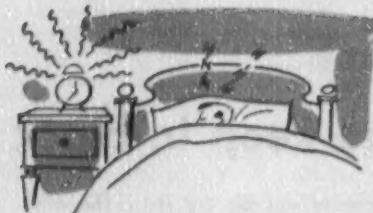
City _____ Zone _____ State _____



Send coupon today!

HAPPY-HEALTHY WORKERS ARE *Better* WORKERS

What happened to Joe before eight o'clock this morning?

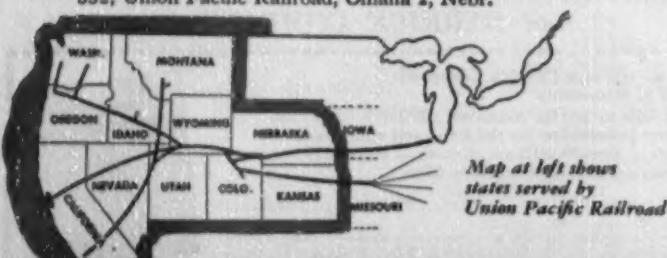


The fact is that even little things are beginning to get on Joe's nerves. Bucking traffic . . . the city's mid-summer heat . . . irritate him. So Joe's work is slipping. And he isn't a very pleasant fellow to be around. This doesn't build up to the "one big, happy family" idea his employer likes to talk about.

Industries that have settled in the "Union Pacific West" have found how important pleasant living conditions are in getting a good day's output from workers . . . and in employee-management relationship.

Sources of raw materials, power, light, and transportation are, as we all know, vital factors to be considered. But the human element is of equal importance, and in the eleven-state area served by our railroad, you'll find all the things which contribute to a happy, healthy life: good schools, hospitals, parks and playgrounds.

Let us explain in detail the many advantages of locating in the West. Your inquiry will be treated as confidential. Ask any U. P. representative or write the Industrial Development Department, Room 332, Union Pacific Railroad, Omaha 2, Nebr.



Map at left shows
states served by
Union Pacific Railroad

UNION PACIFIC RAILROAD

the banks have to get around the law. Sometimes there's an added, unofficial cost to the business borrower: an under-the-table payoff for the lending officer at the bank.

BUSINESS ABROAD BRIEFS

Paradox: London's gold and dollar reserves fell \$4-million last month, to a shade over \$3-billion. But Britons were pleased: They expected a bigger drop because of an extraordinary \$99-million payout to settle debts with the European Payments Union.

Oil business: Anglo-Iranian Oil Co.'s big (\$150-million) refinery at Aden, on the tip of the Arabian peninsula, has gone on stream four months ahead of schedule. It handles 120,000 bbl. daily, lifts AIOC's refining capacity to 600,000 bbl. daily—without Abadan. . . . Greece is in the market again for a 30,000-bbl.-a-day refinery, is now looking for people (1) to build it and (2) to run it for the government. U. S. oil men are cool to the deal; Germans are likely to get the contract. . . . A two-year aerial survey of Peru's Amazon basin, which some believe may be a rich oil source, is under way. Canadian, Peruvian, and U. S. companies (Socony-Vacuum, Texas Petroleum, Richmond Oil) are cooperating in the hunt.

In Canada: Exports for the first half of this year dropped sharply—down \$144-million—compared with the first half of 1953. They hit a 3-year low of \$1.9-billion. Lower wheat sales accounted for much of the decline. . . . More than half of Canada's 15-million population will be within good range of a TV station before yearend, when ten more stations are slated to begin operations.

Mexico: is about to get more TV and radio sets. Stromberg-Carlson Co. has made a deal with Corporacion Mercantil de Mexico, S. A., under which Mercantil will manufacture Stromberg's equipment. The agreement was made to meet a sales problem caused by a recent hike in import duties.

In the Argentine: Bayer A. G., Leverkusen, West Germany, one of the survivors of the I. G. Farben deconcentration, is joining forces with Cia. Quimica to manufacture Bayer anilines and dyes in Argentina. . . . Buenos Aires has given an O.K. for a new industrial abrasives plant planned by a mixed U. S.-Argentine company. Carborundum Co., Niagara Falls, is the American partner.



THIS PRIZE-WINNING, 40 lb. lake trout displayed by Howard Wood is bigger than his small son, Gary. When Mr. Wood hooked this beauty in the deep waters of Lake Superior he proved he had learned...

How to catch fish when they're not biting

Fishermen used to have a devil of a time hooking fish like this in the hot summer time.

Trouble was that big fish like to stay way down on the cool lake bottom. Ordinary trolling line just wouldn't go down there.

All sorts of gadgets were tried. Trick sinkers and attachments were devised to get the hook down where the fish could grab it. The lines themselves were cored with heavy substances to make them sink.

Finally, metal lines were given a trial. They went down all right. But other difficulties came up. They were too heavy. Too thick, too awkward altogether. To be flexible enough for easy handling, the wire line had to be light and fine. To be fine, the metal had to be very strong.

It also had to be a rustless, corrosion-resisting metal... and tough to stand the twisting, diving, leaping

yanks of a fighting fish.

Then the news came down from the "big muskie" lakes of Canada about the discovery of a line that has revolutionized deep trolling from mountain lakes to coastal seas: MONEL Line.

Today, wherever you see fresh water and salt water fishermen trolling for the big ones, way down deep, you find them using Monel lines... and catching the biggest fish in the hot summer months when fishing used to be "dead."

Like the fishermen, you too may face metal selection problems.

When you are up against a situation where the right metal may protect the "fine line" of your production, Inco's engineers may be able to help.



Nickel Alloys

Why don't you write them today and outline your problem?

The INTERNATIONAL NICKEL COMPANY, INC.
67 Wall Street New York 5, N. Y.

If you are interested in fishing, you'll want to write for your free copy of "How To Catch Fish When They're Not Biting."

It contains 44 pages

packed with tips and useful information.

Address Fishing
Editor, The International Nickel
Co., Inc.



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Inconel "X"® • Inconel "W"® • Incoloy®
Nimonic® Alloys • Nickel
Low Carbon Nickel • Duranickel®



SMOOTH, SQUARE BOXES for packaging nails are now a well-established trend. Carpenters like the replaceable lid and the freedom from splinters. To hardheaded nailmakers, they mean important savings in a period of tougher competition.

New CORRUGATED nail containers save 4% weight, 25% space

Behind the recent big swing from wooden nail kegs to corrugated containers are two very down-to-earth reasons: cost and convenience.

They cost less to buy, for one thing—a fact that nailmakers greet with warm enthusiasm. When the jobber receives his first shipment in corrugated containers, he notices a shipping charge saving of 4 lbs. for every 100 lb. package. Then if his warehouse is almost full, he can put off expanding a little longer, because these square shaped corrugated containers require 25% less space.

Before one leading nailmaker decided

to switch to corrugated, he put the container through an elaborate series of tests. Dropped from a height, corrugated stood up better than wood. It stacked better, handled easier, had its own replaceable lid, and eliminated the danger of splinters. It weathered so well, the U.S. Navy passed it for overseas shipment. And the side-printing feature provided for the first time a convenient, inexpensive way to give nails effective brand and size identification.

Nails are an example of the countless

heavy materials now being shipped in corrugated containers. Other items are delicate things, bulky things, tiny things. Whatever you ship, chances are corrugated containers can reward you with new benefits. Your regular box supplier can show you how.

For over 50 years, boxmakers all over the world have depended on Langston machines to produce the strong, inexpensive corrugated board that has found so many uses. *Samuel M. Langston Co., Camden 4, N.J.*

LANGSTON

Corrugated Container Machinery

INTERNATIONAL OUTLOOK

BUSINESS WEEK
AUG. 14, 1954



A BUSINESS WEEK

SERVICE

Mendes-France got a green light this week for his program to modernize the French economy (page 98).

Now he will tackle the European Defense Community, with a vote due by Aug. 27. The chances are he will score a victory on that, too.

This would make four in a row for the new French premier—Indochina, North Africa, economic reform, and EDC.

But Mendes will water down the EDC treaty before he presents it to the National Assembly. That's the only way he can be sure of getting it ratified.

His idea is to have a grouping of national armies rather than a joint national army, which was the original idea.

He is not interested, either, in making EDC a stepping stone to economic and political unity in Western Europe. That whole scheme is pretty well dead now.

Mendes aims to get an O.K. for his version of EDC from the other five members at Brussels next week.

Before the Assembly meets, though, Mendes may shake up his cabinet, bring the Socialists in. This would serve a double purpose.

To get EDC through, he needs the whole Socialist party behind him. To be sure of that he probably has to include them in his government.

This would be necessary, in any case, when he really gets down to his economic reforms. Some of his present rightwing backers are bound to fall away as soon as Mendes begins to squeeze the inefficient producers in industry and agriculture.

French ratification of EDC will strengthen Adenauer's position in West Germany, make it easier to keep Bonn tied to the West.

But it won't check the demand in West Germany for a new policy toward the Communist bloc.

Once Bonn gets its sovereignty, you can expect growing pressure for direct diplomatic relations with Moscow and Peking.

It's not Communist propaganda alone that is encouraging this new mood in West Germany—though you can't discount the influence of Dr. Otto John, the West German Intelligence Chief who recently went over to the Reds.

There are two far more important factors:

- The West Germans in general now feel that the West can do nothing to restore German unity; the only hope lies in direct bargaining with Moscow.
- The Ruhr industrialists figure that Red China offers the one great opportunity for expanding their exports. They want direct diplomatic ties with Peking so they can get in on the ground floor.

Moscow is doing everything possible to encourage this trend.

Moscow's hostility to the Adenauer government has ended. Now the Kremlin has a soft line. It is plugging for:

- Closer cultural and economic ties between East and West Germany.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
AUG. 14, 1954

• A European "security pact" that would guarantee Bonn against attack from any quarter.

—•—

Don't underrate the current strike wave in West Germany. It's bound to lead to higher wages, hurt the German competitive position in world markets.

The strikes are as important a sign of change in West Germany as is the shifting mood in foreign policy.

The two, together, may well mean that the Adenauer era is coming to an end.

Industrialists in other European countries are quietly gleeful about the West German strikes. They think that German exporters have been living on borrowed time—that Germany's low wage structure couldn't last.

The fact is that for seven years German labor has put national recovery first. The unions have held back while German industry reestablished itself in world markets.

Now the workers figure they deserve a bigger share of the cake. And apparently they mean to get it by using American strike methods.

—•—

A political crisis—and a dangerous one—has blown up in Brazil. At midweek there was rioting in Rio, and calls for a revolt against President Vargas.

Trouble began with an attempt to assassinate an anti-Vargas newsman. An air force officer was killed by mistake. The murderer's trail seems to lead to Vargas' palace retinue. So military men, who waste no love on Vargas, talk revolution.

So far, cooler heads have prevailed. Vargas may well stay in office for the rest of the year—but in an atmosphere of extreme instability.

Usually, Brazil's wild and wooly politics don't trouble businessmen too much. But you also have a worsening economic situation now (BW—Jul. 24'54, p112). Put them together and they spell trouble.

Coffee, high-priced, is piling up unsold; few dollars are coming into the country; internal inflation keeps spiraling. The cruzeiro plunged to 68 to the dollar this week.

Talk of outright devaluation gets louder. But it's not likely right away. Brazilians will try to sweat out the next few weeks in hopes that their coffee will move. They may be forced to cut their minimum price.

—•—

Japan's economic troubles have Washington worried again.

But there will be no emergency aid or loan program for Japan. U. S. officials don't think there's any danger of an early economic collapse.

So for the time being, the U. S. will only:

• Press hard to get the free world to grant Japan tariff concessions (page 102).

• Sell Tokyo some surplus farm commodities for yen, under the new foreign agricultural disposal program.

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You're looking at two warehouse fires!

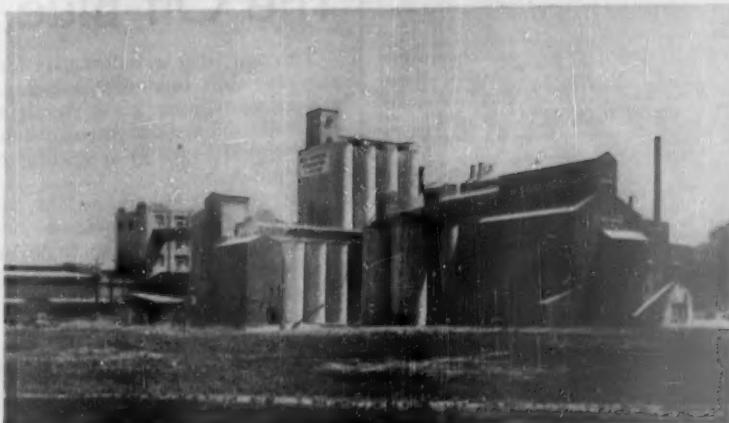
When that pall of black smoke rolling across an eastern city finally cleared, a 10-story warehouse had been completely gutted. The flames, leaping across the street, also damaged another building.

The other fire, in a warehouse of the Rice Growers Association of California, was less dramatic but no less *real*. When fire struck here, a Grinnell Automatic Sprinkler System, installed by an alert management, quickly checked the flames.

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WALTER A. PETERSON, Treasurer
August 2, 1954.

THE MARKETS

Even After Last Week's Selloff...
...18 of the 20 Most Active Stocks
Showed Plus Signs

Stock*	Previous Week's Close	Week's High	Week's Close	Percent At Week's High	At Week's Close
Avco Mfg.	\$ 5.75	\$ 6.87	\$ 6.62	+ 19.5	+ 15.1
G. L. Martin	26.50	29.87	28.50	+ 12.7	+ 7.5
Curtiss-Wright	12.12	13.00	12.50	+ 7.3	+ 3.1
Gen'l Dynamics	61.75	72.87	67.12	+ 18.0	+ 8.7
Chrysler	62.87	65.87	59.12	+ 4.8	- 6.0
Grumman Aircraft	33.00	37.75	37.25	+ 14.4	+ 12.9
Fairchild E & A	14.75	16.37	15.37	+ 11.0	+ 4.2
Boeing	54.00	62.25	62.25	+ 15.3	+ 15.3
Lockheed	38.87	41.75	40.50	+ 7.4	+ 4.2
Int. Tel. & Tel.	21.00	22.37	21.50	+ 6.5	+ 2.4
Youngstown S & T	58.00	65.00	58.25	+ 12.1	+ 0.4
Pan Am. W. A.	14.12	15.25	14.75	+ 8.0	+ 4.5
So. Pacific	44.62	47.50	45.75	+ 6.5	+ 2.5
Raytheon	14.12	15.12	14.12	+ 7.1	+ 0.0
Elec. & Mus. Ind.	2.50	3.00	2.75	+ 20.0	+ 10.0
Jones & Laughlin	25.87	27.37	25.87	+ 5.8	+ 0.0
Am. Tobacco	60.00	60.12	58.00	+ 0.2	- 3.3
Mack Truck	20.50	22.87	21.50	+ 11.6	+ 4.9
Gen'l Electric	44.00	46.62	44.75	+ 6.0	+ 1.7
Lehigh C & N	8.25	10.12	9.50	+ 22.7	+ 15.2

* Listed by shares traded on N.Y. Stock Exchange

The Off-Blue Chips Take Over

The new twist in bull market leadership—the shift from the blue chips to the secondary issues, led by the aircrafts, and to the out-and-out speculative shares (BW-Jul. 31 '54, p108)—is getting even more noticeable.

Just as conservatives on the Street had warned, the downgrading—moderate as it is—is hewing to tradition in producing a more volatile, erratic performance from day to day. For confirmation, you have only to look at the tally sheets covering the Big Board's August trading sessions. The month is only half gone, yet there are more erratic daily fluctuations than the Street has seen in years.

It's getting commonplace for a stock to boom one minute, nosedive the next, and then go through another complete cycle before the close of a week's trading. The table above hints at how wide have been the price swings of last week's 20 most active stocks, even though it doesn't record their low points along the bumpy way.

• **Mostly Gainers**—It's noteworthy, of course, that these 20 stocks wound up

with net gains. Yet another phenomenon is important, too: At one time, half this group showed gains in the week ranging from 11% up to 22.7%, yet by the end of the week only five could boast an advance of 10% or more.

Similarly, at one time the group of 20 stocks averaged an 18.9% gain, while trading closed last Friday with an average gain of less than 7%.

The number of big gains made during this selling period is surprising, and the losses suffered by other stocks haven't been so large as you would expect. To add to the confusion, trading volume lately hasn't proved so much of a price-trend indicator as it usually is. True enough, last week's worst selling spree was accompanied by volume big enough to make the tape run late. But often the volume tended to dry up as prices weakened, and to spurt during rallies.

Many of the Big Board's losers are rated as blue chips, or at least light blue chips. Early this week, for example, such long-time market leaders as Amoco Petroleum, General Electric, Union

Carbide, Westinghouse Electric, and Shell Oil were selling at levels 10% or more below their 1954 highs.

• **Speculation**—The shift away from the royal purple issues means, in the words of one Wall Streeter, that "the short-term trader is taking the ball away from the investor." That means speculation, though most people along the Street don't like to think about it, and few admit being worried.

This attitude isn't new, of course. Few Streeters were disturbed while the 1929, 1937, and 1946 bull markets were nearing their end. However, this time they can dredge up plenty of reasons for their unconcern.

For one thing, the total economic picture this time is quite different (BW

—Jul. 10 '54, p26). For another, the downgrading that has been going on hasn't yet been marked by speculative excesses. Some recent favorites of buyers seem to have reached prices that are high enough, but many others still seem undervalued.

• **Market Wisdom**—Such old pros as Standard & Poor's and Moody's view the market with cautious approval. S&P does point out that "at the present advanced stage of the market, allowance must be made for more frequent shakeouts" such as last week's. Moody's likewise notes that it is becoming harder to find attractive purchases "except those of rather lower quality" so Moody's suggests that buying "be undertaken with care."

First-Half Dividends Take a Jump

Dividends paid on common stocks listed on the New York Stock Exchange totaled \$2.97-billion for the first half of 1954—a jump of 7.5% over 1953's first half.

Of the 1,070 issues listed on the Big Board, 924 paid dividends in the first half of 1954—314 companies increased their payments, 520 paid the same, and 125 companies reduced or omitted payments they had made in 1953. The total of 125 in this group included 35 companies that paid no cash dividend in first half of 1954 although they had paid some cash in the first half of 1953.

Farm machinery, textiles, automotive companies, and U.S. companies operating abroad showed biggest percentage losses in payments.

Biggest gains were racked up by aircrafts, paper and publishing, and electrical equipment. Some industries that have felt the effects of recession most severely—such as steel, and railroads and railroad equipment—actually showed percentage gains in dividend payments in the first half. But in every industry some of the gain was accounted for by payments deferred from late 1953 to January, 1954, for tax purposes.

Stock Group	Group	No. of Issues	No. of Payers	Estimated Dividends (In millions)			Change 1954 vs. 1953
				Higher	Same	Reduced	
Aircraft		36	19	11	8	4	\$37.2 \$20.9 +77.3%
Amusement		24	21	9	12	1	31.0 26.4 +17.3
Automotive		68	58	11	38	11	258.1 269.1 -4.1
Building trade		31	27	12	14	3	33.4 31.5 +6.1
Chemical		86	80	24	49	7	312.5 280.3 +11.5
Electrical equipment		23	21	7	13	2	96.6 76.0 +21.8
Farm machinery		7	6	..	1	6	24.2 31.2 -22.4
Financial		34	29	14	14	3	59.5 57.3 +3.8
Food products, beverages		68	61	17	37	9	106.9 102.1 +4.8
Leather, leather products		10	8	2	6	..	10.9 10.6 +3.4
Machinery, metals		106	92	38	51	8	106.5 94.9 +12.2
Mining		40	30	8	13	11	97.6 96.9 +0.7
Office equipment		10	10	4	2	4	18.0 17.7 +1.7
Paper, publishing		37	33	14	17	2	61.9 49.2 +26.0
Petroleum, natural gas		51	49	14	32	3	473.1 459.7 +2.9
Railroad, railroad equipment		81	64	23	39	3	158.0 145.8 +8.4
Real estate		10	8	6	2	1	9.3 8.5 +9.7
Retail trade		70	63	13	42	10	162.1 138.6 +17.0
Rubber		9	9	3	4	2	27.5 26.1 +5.1
Shipbuilding, operating		10	9	3	5	1	9.8 9.2 +6.0
Steel, iron		37	30	12	16	4	133.6 117.9 +13.2
Textiles		44	32	6	17	14	32.6 34.6 -5.9
Tobacco		15	14	4	8	2	47.8 42.1 +13.5
Utilities		108	104	52	52	1	561.6 505.9 +11.0
U. S. companies operating abroad		24	15	..	9	7	24.8 30.9 -19.8
Foreign companies		17	12	..	10	4	53.2 53.9 -1.3
Other companies		24	20	7	12	2	22.6 22.7 -0.5
Totals		1,070	924	314	520	125	\$2,966.4 \$2,760.3 +7.5%

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Auto Wages: The Brakes Are On

● During the lush postwar sellers' market, auto makers paid almost any price to keep their employees.

● Now they—particularly the smaller ones—are jockeying to get wages and fringe benefits back in line.

● Studebaker's efforts to make its union see the light may foreshadow 1955 bargaining demands of other employers.

The 1955 bargaining goals of some auto manufacturers and auto suppliers were foreshadowed this week on widely scattered fronts. But all the actions had the same basic purpose: to bring wages and contract fringe benefits into line with a company's ability to pay.

As a climax to an initially fruitless attempt to persuade employees to amend its contract's pay provisions, Studebaker Corp., South Bend, Ind., last weekend gave a 60-day notice of intent to end its contract. Its employees then decided to reconsider their first decision.

American Motors Corp., meanwhile, was combing over all the money provisions and work standards in its contract at Kenosha, Wis.

And Pressed Metals of America, Inc., at Maryville, Mich., a supplier, apparently made up its mind either to liquidate or sell out after a futile effort to persuade its union to rewrite most cost-affecting clauses in its contract.

• **Kick-Back**—The international union involved in each case is the United Auto Workers (CIO). And what's happening doesn't particularly surprise either the union or auto industry officials. In the lush sellers' market after the war, all companies in the business—both car makers and suppliers—gave UAW pretty much what it wanted (although only after long strikes at some of the larger companies). The smaller auto companies, particularly Willys, Kaiser, Studebaker, and Nash, were even more generous in some instances than the Big Three—General Motors, Ford, and Chrysler. They had to be, for the state of the market gave them an opportunity such as they never had before to bite into the big companies' share of the market.

Now, in the tighter market, that open-handed policy of a few years ago is sparking the present troubles. And some of the motor makers' industrial relations people have resolved that in

1955 UAW cannot expect the small manufacturers to meet the wage scales and benefits offered by the Big Three. You can see their thinking in what has been happening.

• **Wrong Approach**—Earlier this year, Kaiser-Willys succeeded in getting its union to drop an incentive plan that kept average K-W wages higher than the average paid by GM, Ford, and Chrysler (BW-Apr. 24 '54, p144). After K-W's success, Studebaker, the only other auto producer with an incentive-type contract, took the same approach. Late last week, with less than half of Studebaker's 10,000 employees voting, the local turned down the company's proposal.

There were two main reasons, apparently, why what had worked at Kaiser-Willys failed at Studebaker. One was a personality, the other an organization. At K-W, revision of the contract was spark-plugged by Richard T. Gosser, a UAW vice-president, whose personal following at Willys probably is stronger than that of any other UAW leader in any other plant. At Studebaker, Raymond Berndt, UAW regional director for Indiana and Kentucky, doesn't have the unquestioned obedience commanded by Gosser.

In addition, the Studebaker local has long been somewhat of a maverick among UAW locals. In recent months, for instance, it has repeatedly endorsed short work weeks—in lieu of partial layoffs—while international UAW policy is for layoffs and a 40-hour week.

• **Foresight**—UAW headquarters in Detroit must have had some inkling of what was ahead in South Bend. The original plan was for UAW Pres. Walter Reuther or one of the top national officers, such as Secy. Treas. Emil Mazey, to present the revision proposal to the Studebaker workers' meeting. At the last minute this idea was dropped. The meeting got side-

tracked into discussions of fine details, rather than being held to the broad issue.

• **Proposals**—The principal proposals—endorsed by UAW international and Local 5 officers—put before the Studebaker workers were these:

• Replacement of incentive pay by hourly pay. Under the incentive plan, the average wage at Studebaker was \$2.37 an hour, compared with \$2.07 at the Big Three plants. A 15% cut in the average would bring Studebaker's average down to about \$2.03 an hour.

• Reduction in night-shift premium pay from a flat 10% to 6% for afternoon and 8% for midnight shifts. Industrywide night premium is 7.5%.

• Reduction of triple-time for holidays to the double-time generally paid elsewhere in the industry. Reduction of wash-up and rest time from about 43 min. to 24 min. at other plants.

• In addition, there were several benefits to the union: a full union shop, an arbitration clause, improved vacation pay, and an increase from four to six weeks in the period during which the company would pay group insurance premiums during layoffs.

• **Too Hasty**—Because of their agreement on the short work week, Studebaker employees have been averaging about two days' pay a week—around \$35 a week, according to local officers. So, about 3,000 of the 5,000 workers at the meeting listened no further than the pay cut. They're not earning enough now to support their families, they said, so why take a cut?

Company officials hoped that the revised wages would trim from \$60 to \$75 off the cost of a \$2,000 car and, with other savings, enable Studebaker to lower its prices to competitive levels.

Even before proposing the wage cut, the management had sliced its executive corps by 12% and had imposed salary cuts ranging up to 30% for executives in the over-\$20,000 price bracket.

• **Change of Heart**—At the meeting where the workers rejected the contract revisions, union officials warned that contract cancellation would follow—leading to the belief in informed circles that UAW headquarters not only were advised in advance of Studebaker's next step, but had tacitly endorsed it.

Although in the Studebaker situation, UAW international officials are backing what appears to be a pay cut, there is no illusion in auto management circles that the union is ready to lower wage scales generally.

Dissent in NLRB...

...grows, as Democratic members take issue over Republican majority's latest decisions.

The National Labor Relations Board continued to reconsider former board policies last week—and three of its decisions drew immediate labor criticism. The unions charged that the board's Republican majority is "revising" the Taft-Hartley law by board orders, instead of leaving changes to Congress.

• **Three Decisions**—The latest decisions to attract hot retorts from labor held:

• If, during bargaining with a multi-employer association, a union strikes one of the group, the others can lock out employees—that is, refuse to allow them to work. In the past, NLRB had held that an employer association lockout under such circumstances was an unfair labor practice.

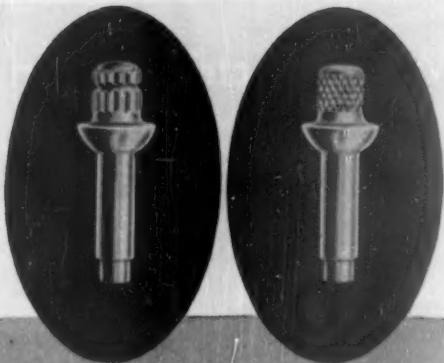
• An employer may question his employees about their union affiliation or activities, under certain circumstances, where there is no implication of reprisal or benefit. In the past, any such questioning was held to be an unfair labor practice.

• A union may not strike over contract demands except when the contract is open for either alteration or renegotiation. Even so, the union cannot strike before the end of a 60-day "cooling-off" period after a formal notice of its intention to negotiate contract changes. In the past, NLRB had held that a union could strike over demands at any time during the life of a contract provided the union served a formal notice calling for contract talks, and observed a 60-day notice period.

The three decisions were written by NLRB's Republican majority—which began reviewing the decisions of past boards early this year (BW—Apr. 24'54, p152). One holdover from the last Democratic-named board, Ivar H. Peterson, sided with his Republican colleagues on the multi-employer lockout ruling, but joined Democratic-named Abe Murdock in strong dissent on the others.

• **Broadens Split**—The latest decisions further broaden the split between the Republican majority and the Democratic minority.

• **T-H an Issue**—Since the Taft-Hartley Act is bound to be an issue again in this fall's Congressional campaign, this situation has a particular political significance. When campaigning gets under way, the real debate may center not so much on T-H as the pros and cons of the changed interpretation of its provisions.



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What Electrical Manufacturing Contracts Show

Generally, according to a National Industrial Conference Board study, there's a similarity — no matter whether they were negotiated by International Union

of Electrical Workers (CIO), United Electrical Workers, or International Brotherhood of Electrical Workers (AFL). Some key provisions:

Contract Duration	►	<i>Mostly one year, at most two, but some IBEW pacts run as long as seven years.</i>
Reopenings	►	<i>Over half (74) can be reopened—usually on wages only—before expiration.</i>
C-of-L "Escalator"	►	<i>Now in 28 contracts, mostly IUE. Trend is to eliminate them in 1954 bargaining.</i>
Productivity Raises	►	<i>They're automatic, annually, in 12 contracts—half of them negotiated by UE.</i>
Paid Holidays	►	<i>Six or more are given in 141 contracts — all but one. Two-thirds of IUE contracts give more than six — run to as many as 10 a year.</i>
Holiday Pay	►	<i>Straight time if the holiday isn't worked, frequently double-and-a-half time (common in IBEW contracts) if the holiday is worked. Policy on weekend holidays varies.</i>
Vacations	►	<i>Up to a three-week maximum now appears standard, but the rules vary on when workers get the second or third week of vacation.</i>
Premium Pay	►	<i>A night-shift premium is specified in 141 pacts; the amount varies from 3¢ an hour to 18% of base pay, with the most frequent rate 10¢ an hour.</i>
Reporting Pay	►	<i>If workers are sent home, they're guaranteed at least four hours' pay in half of contracts — but companies generally have an "act of God" escape clause.</i>
Call-In Pay	►	<i>Two out of three contracts require at least four hours' pay for workers called in to work outside their regular hours.</i>
Union Security	►	<i>Of 142 contracts, 113 give the union some form of union-security clause; 56 provide for a union shop, 24 for maintenance-of-membership, 23 for a modified union shop, and the other 10 for the preferential shop, agency shop or other security forms. A checkoff of union dues is provided in 126 contracts. Escape clauses are common.</i>

No One Union Sets the Pattern

Employers in most major industries—steel and autos, for instance—have to deal at the bargaining table with only one important union. But in the electrical manufacturing industry, now in the midst of contract talks, there are three fiercely competing unions. Negotiations must always take into account not only what the bargaining union wants, but also what the other two want or get.

• **Complicating**—The result is some of the most complex bargaining in industry today, with no one dominant union setting the over-all picture—as the United Steelworkers (CIO) did in its contract settlement in steel last June.

Instead, an increasing number of labor-management contracts cover all the competing unions, plus some minor ones. General Electric's 1954 agreements with two big unions (the independent United Electrical Workers and

AFL's International Brotherhood of Electrical Workers) and 180 small ones have undoubtedly influenced other employer-union bargaining—even though GE firmly opposes "pattern" bargaining and insists that it, and every other employer, should negotiate solely on the basis of its own economic position.

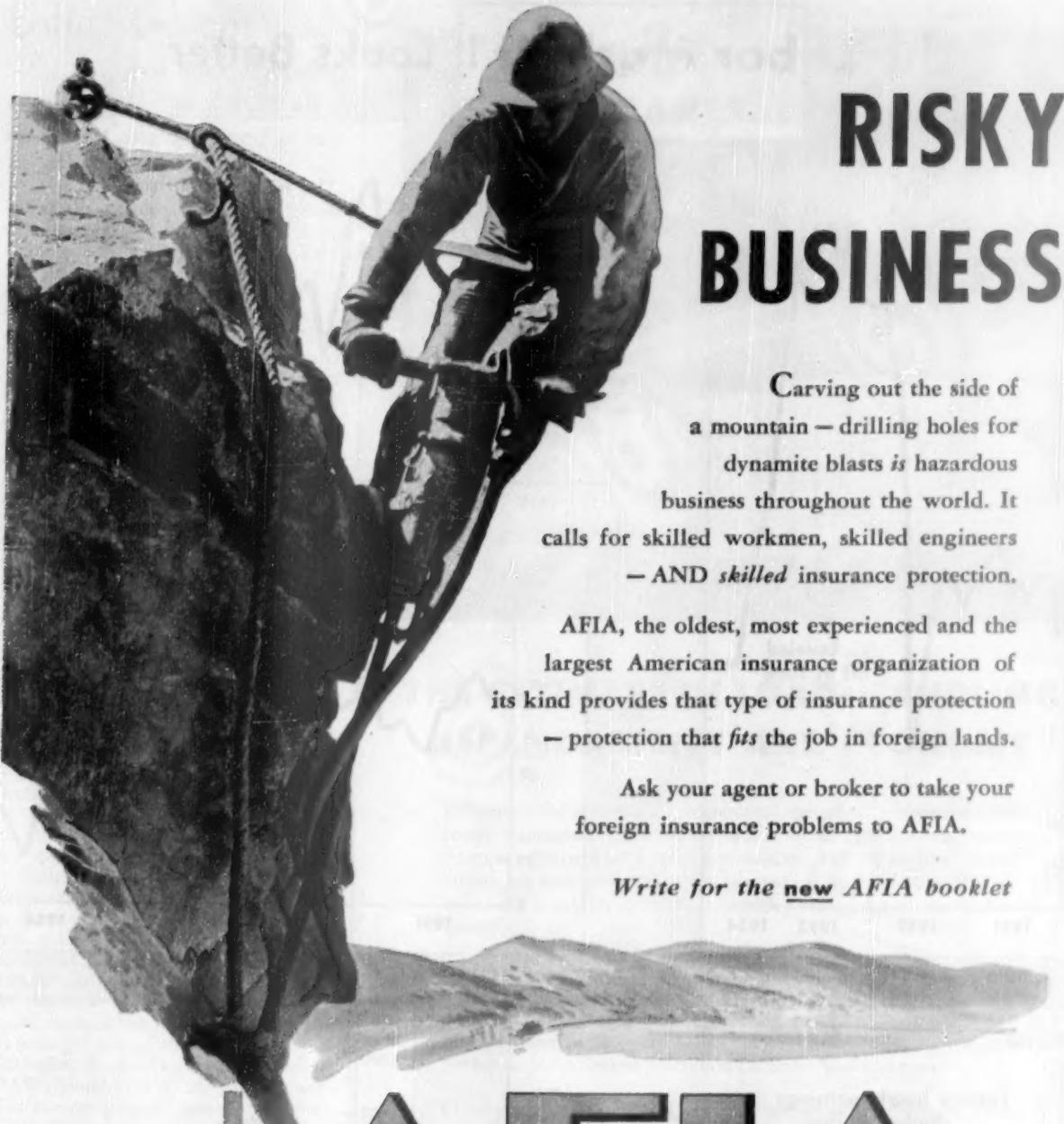
Because it's important to employers to know what other employers and other unions are doing, the National Industrial Conference Board, Inc., a private management service, this week issued a summary report on a sampling of 142 contracts covering 357,627 workers in the industry—196,728 represented by the International Union of Electrical Workers (CIO), 126,660 by UE, and 34,239 by IBEW.

The analysis shows employers in the electrical manufacturing and allied industries what other companies (many identified) have agreed to in contracts.

There are some shortcomings, however.

• **What Isn't Shown**—Wages aren't compared; they frequently differ within a company as well as among companies and among unions. And, because that doesn't show up in any analysis, important intangibles aren't listed.

For instance, it's not unusual in contract bargaining to give up an extra holiday for a cent or so more in pay, or maybe just the opposite. In addition, a company with a below-par showing on vacations and holidays may have made up for them with a more liberal pension and insurance program, not included in NICB's survey. Similarly, the company that looks the most liberal in contract extras may have gained by them in the fine print of the contract—through union-conceded clauses limiting grievances, spelling out broader management rights, or guaranteeing that work won't be interrupted by walkouts.



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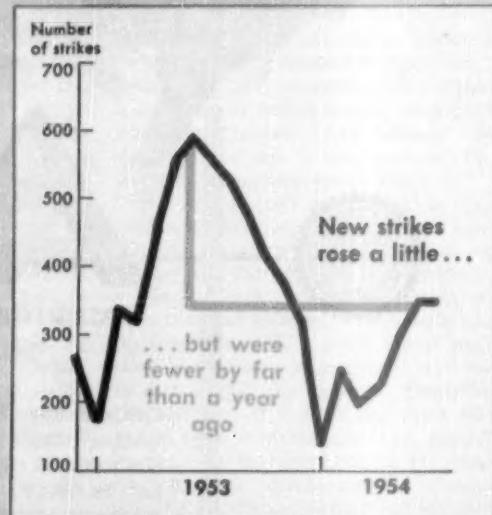
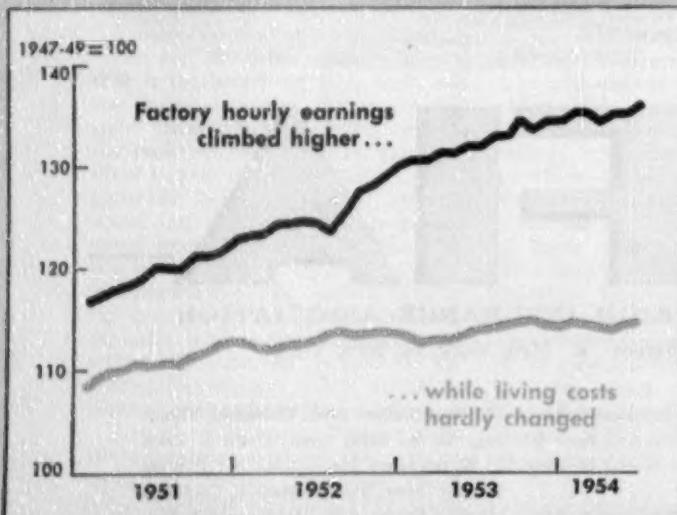
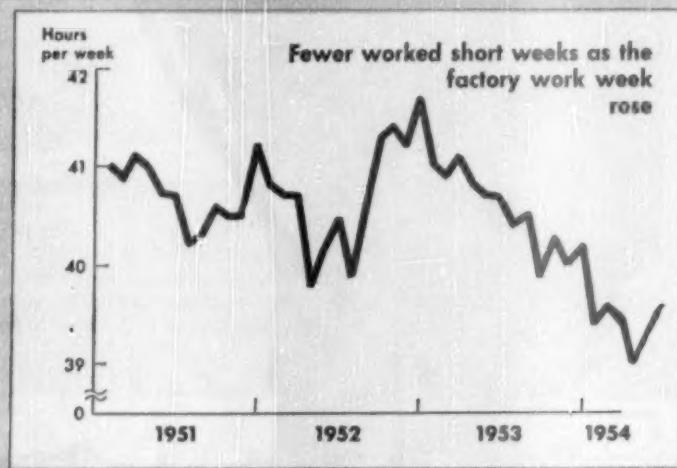
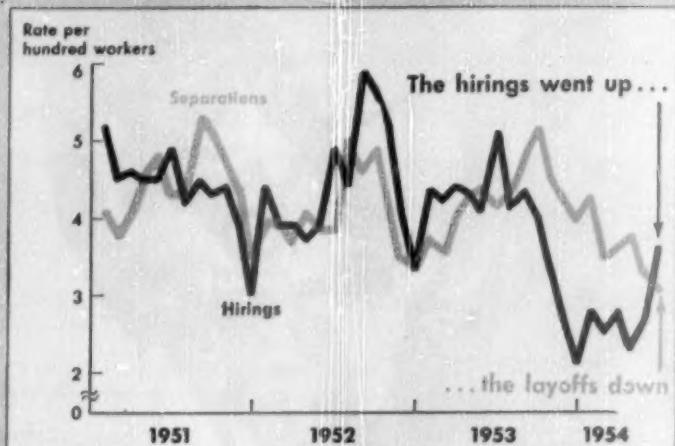
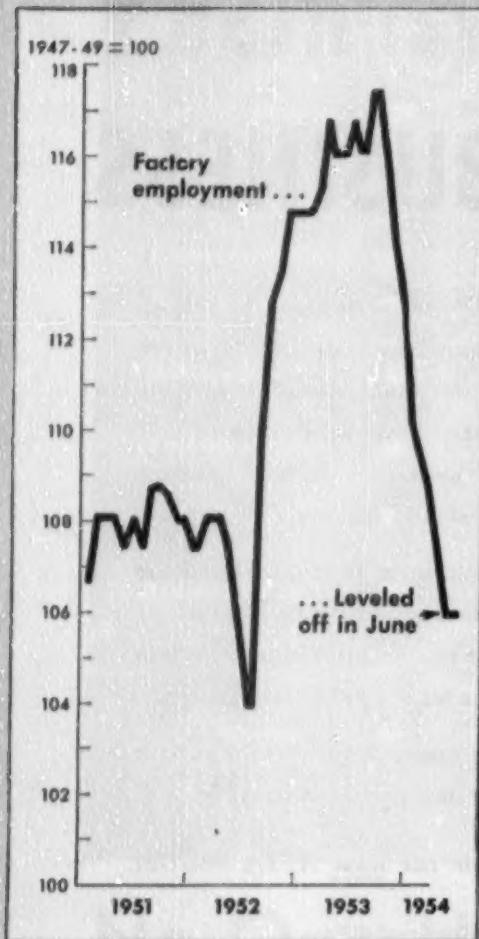
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The Labor Market: It Looks Better



Data: U.S. Bureau of Labor Statistics.

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Leftist Unions . . .

... beat back rightwing challengers in two NLRB elections, but are defeated in two others.

Leftwing unions, which are fighting to hold their own these days, staved off challenges in two National Labor Relations Board elections over the past two weeks—but lost to rightwing foes in two others. Interest in the results ran high, in two cases largely because of side issues—an inside-CIO fight in one, and the possible effect on electrical-union bargaining in the other.

• **USW vs. UAW**—The leftist Mine, Mill & Smelter Workers successfully defended its 15-year jurisdiction over employees of American Brass Co. (subsidiary of Anaconda Copper Mining Co.) in Torrington, Conn. In doing so, it defeated two CIO unions—the United Steelworkers and United Auto Workers—which were fighting each other for Torrington representation rights. That, more than the MM&SW victory, drew attention to the American Brass vote.

The mine-mill union organized the Torrington workers in 1937 and won bargaining rights for them in 1939. It was a CIO union then, but was later ousted in CIO's purge of unions that followed a pro-Communist line. The Steelworkers sought to take over some MM&SW contracts, the Auto Workers others. A loose agreement reportedly was worked out to split the jurisdiction.

Under this agreement, UAW has challenged the mine-mill union before at Torrington, unsuccessfully. This mid-year, with UAW-USW rivalry building up within CIO, the steel union sought jurisdiction over the Torrington plant. At the same time the Auto Workers again made a bid for rights there. Efforts to get one of the CIO unions off the ballot (the local CIO council backed UAW, wanted USW off) got nowhere. The two campaigned against each other while campaigning against MM&SW. The NLRB poll wound up with 435 votes for Mine-Mill, 188 for USW, 177 for UAW.

The UAW-USW rivalry raised new worries among CIO people who feel that the federation's future depends on peace between the two unions—and between their leaders. But spokesmen for CIO and the two internationals discount its significance. UAW and USW have been on the same ballot before, these spokesmen point out. Concern lingers in CIO ranks despite that.

• **Victory—and Raise**—In Bloomfield, N. J., another leftwing union, the United Electrical Workers, lost two plants to rightwing foes in NLRB polls



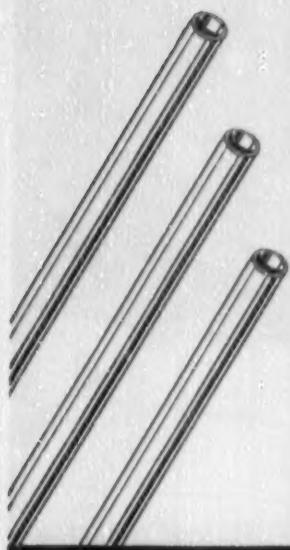
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And Qualitube is a word ideally suited to describe Wolverine's electric-welded steel tube. Obviously, it points to quality.

Both craftsmanship and quality go hand in hand at Wolverine. Wolverine has produced non-ferrous tubing to the closest of tolerances, for almost 40 years. Quality was built into every foot. It was only natural that when manufacture of steel tube started that the product would be just what the industry needed. And that's why it's been grabbed up so readily. Yes, and that's why we call it Qualitube.

Wolverine produces Qualitube in a wide variety of sizes and analyses. It's especially suitable for condensers and heat exchangers, boilers and for mechanical purposes. Write today for a copy of Wolverine's Steel Tube Catalog. WOLVERINE TUBE, Division of Calumet & Hecla, Inc., 1501 Central Avenue, Detroit, Michigan. Plants in Detroit, Michigan and Decatur, Alabama.

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last week. One, a setback at the hands of CIO's International Union of Electrical Workers in the General Electric chain, could pose a problem for IUE in negotiations with the company.

IUE is still balking at accepting GE contract terms, including a 2.68% raise, that have been taken by 80-odd other unions—among them rival UE. Employees in the company's Bloomfield air-conditioner plant had been getting the 1954 terms for a month when, last week, they voted to shift from UE to IUE, 725 to 544. After the election, GE announced that the Bloomfield employees will still get "the increases they have been receiving."

This could cause complications for IUE. The difference of slightly more than 5¢ an hour in rates paid by IUE plants and 1954-contract GE plants is already creating scattered dissatisfaction. IUE was rebuffed two weeks ago in an attempt to win jurisdiction over GE's Auburn (N. Y.) plant—185 to 362 for the International Assn. of Machinists (AFL), which promised it would "immediately sign the new GE contract."

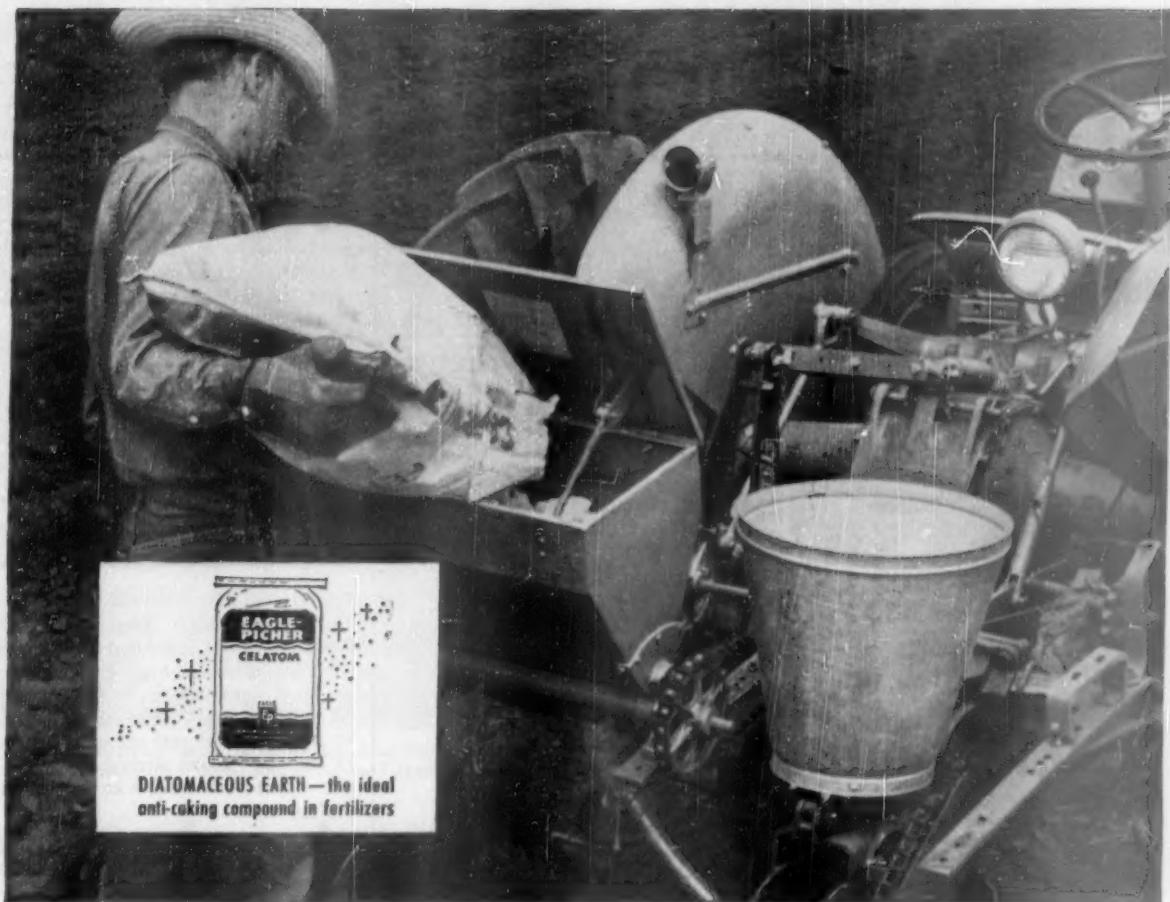
The same issue of IUE refusal to accept the company's terms came up last week among 2,800 employees in GE's Appliance Park, near Louisville. The United Auto Workers (AFL) challenged IUE and asked for an NLRB election. It promised employees that if it wins jurisdiction it will sign up for the GE raise already in effect at a plant under UAW-AFL contract at nearby Owensboro, Ky., and for nonunion workers in Appliance Park.

While IUE doesn't discount the threat, it points out that it won bargaining rights for Appliance Park workers a year ago, polling 1,035 votes to 267 for a council of AFL unions (not including the AFL Auto Workers) and 147 for UE.

• **Other Results**—In the other two elections results of the past two weeks, UE lost the Kidde Precision Tool Corp. plant in Bloomfield, N. J., last week, to the AFL Machinists by 52 to 40. UE held onto bargaining rights in GE's Taunton (Mass.) plant, defeating IUE by 244 to 186 in a tight vote.

When a Tough Foreman Rejoins His Old Union

When Jesse W. Buzene stepped down from his job as foreman and reclaimed his membership in the United Auto Workers (CIO), the union penalized him on grounds of "riding the men under him unmercifully" while he had been foreman. Buzene appealed, and has now won his case—but only on a technicality. The broad question of a union's right to hold the threat of punishment over a supervisor, in case



How plants from the past help farmers of the present

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foods, serves as a perfect anti-caking compound, and helps eliminate drill-clogging.

Eagle-Picher Celatom has hundreds of other important applications. As examples, it is used extensively as an insulating material, filter aid, paper filler, flattening and extending agent in paints, filler in plastic and rubber goods. If you would like more facts on Celatom or any of the other Eagle-Picher products listed below, we'll be glad to have the opportunity to talk with you in person.

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he ever returns to the union, remains to be settled elsewhere.

• **Time Period**—UAW Local 12 at the Spicer Mfg. Div. of Dana Corp., in Toledo, convicted Buzene of filing excessive grievances while working as a foreman from October, 1950, to January, 1954. The local suspended him from UAW membership for five years and fined him \$100. That's when Buzene appealed.

The local's appeals board found that the Buzene conviction did not fully meet UAW trial rules; it remanded the case to the local for rehearing. But there no longer was time to set and hold a new trial within the 60-day period allowed for hearing charges against a returned member—so the local voted to drop the case against Buzene and to reinstate him.

LABOR BRIEFS

No raise will be demanded this year by the independent American Watch Workers Union, it announced last week. The union said it was dropping plans for pay demands on Elgin National Watch Co. and Waltham Watch Co. to help its employers get a bigger share of the new market opened as a result of the recent 50% tariff hike on imported watch works.

Nickel workers employed by Hanna Nickel Smelting Co. at Riddle, Ore., a subsidiary of M. A. Hanna Co. of Cleveland, have picked the United Steelworkers (CIO) to bargain for them. Voting favored USW, 76 to 31.

Merger talk inside the Gas, Coke & Chemical Workers (CIO) doesn't completely favor uniting with the Oil Workers International Union (CIO). There is sharp division among officers over the proposal (BW-Jul. 31 '54, p106). Lively debate on the issue is expected at the union's convention in St. Louis next month.

The Pictures—Clark Equipment Co.—135 (top); Columbus Dispatch—123; Henry G. Compton—44; General Electric Co.—133; General Motors Corp.—135 (bot.); Hugelmeyer—130; International News Photos—46, 143; Herb Kratovil—84, 85, 86, 87, 90; Lockheed Aircraft Corp.—132; Ed Miley—43; House & Homes by Ben Schnall—78 (bot.); Howard Staples—30, 31; Techbuilt Homes—78 (top); United Press—98, 102, 138; Wide World—50, 52, 54, 56, 69.



MAGIC CITY SHOPPING CENTER, Barberton, Ohio, has over three dozen retail stores, plus doctor's and dentist's offices, bank,

bowling alley. Many of the G-E packaged cooling units have heating coils to provide year-round comfort.

G-E Packaged units offer tremendous flexibility in Air Conditioning shopping centers

What's the best way to air condition today's complex shopping centers?

Flexible new General Electric Packaged Air Conditioners provided the answer for Barberton, Ohio's, huge new \$3,500,000 Magic City Shopping Center.

More and more buildings of all kinds are being cooled this new modern way. Here's why.

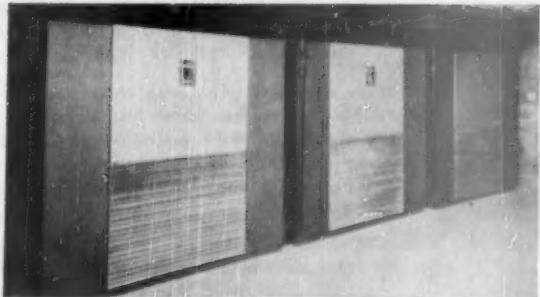
SAVED \$10,000 IN ONE APPLICATION. In one of the largest stores, use of G-E units made possible savings of about \$10,000 compared to estimate for conventional central system.

REDUCED INSTALLATION TIME 30%. In both in-space and out-of-space applications, G-E units helped cut estimated installation time by almost a third! Savings can be even greater for air conditioning existing buildings!

FIT EVERY APPLICATION. Units were used in-space, out-of-space, on selling floors, in storerooms, in small and large stores, with and without heating units and cooling towers. About 450 tons of G-E equipment—ranging from 3 to 15 tons—was used.

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To get complete information on how G-E Packaged Air Conditioners can cut the cost of cooling your business, write General Electric Company, Sec. BW13, Air Conditioning Division, Bloomfield, N. J.



W. T. GRANT uses three 15-ton units and one 10-ton unit as a central system in the mezzanine and another 15-ton unit in the basement.

F. W. WOOLWORTH STORE uses five 7½-ton G-E units in-space for flexibility in placement, absence of ductwork and ease in zone control adjustment.



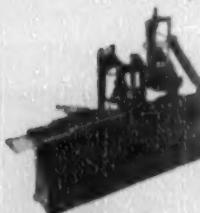
Packaged AIR CONDITIONERS
for business and industry

GENERAL  ELECTRIC



Although seamless pipe was inspected by more dependable means than mere visual "going over," seamless couplings were not—not until the electronic device shown in the picture was developed by Republic. The couplings were inspected by the naked eye.

Republic developed the Electronic Flaw Detector for the inspection of all seamless couplings sold by Republic. Electronic inspection is vastly more reliable than visual.



Now Republic has developed an automatic coupling inspector for use on Republic seamless couplings made at the new Republic seamless tube mill near Chicago. This new machine

automatically inspects all couplings and removes the defective ones.

There are now two of these automatic machines, both at Republic's seamless plant. When you buy well inspected seamless pipe, wouldn't you be wise to buy well inspected seamless couplings, also? Republic's couplings.

YOU BUY MANAGEMENT BY THE TON

When you buy steel by the ton, you put your faith in the manufacturer's progressiveness. You have to, because quality is a virtue that often doesn't show on the surface. Republic's pioneering the electronic testing of couplings is but an example of DOZENS of such developments assuring advanced quality. You can put your faith in Republic quality—by the ton.

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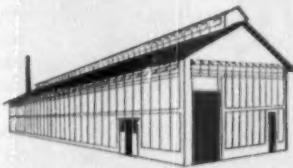


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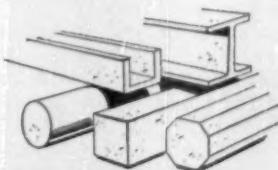
Thousands of steels and steel products now bear the Republic name.

Do you know these?



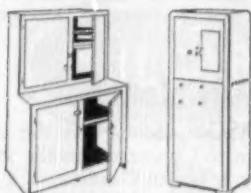
COMPLETE STEEL BUILDINGS

The Truscon Steel division of Republic manufactures a line of standardized steel buildings for industrial uses. These vary from wall-less sheds to large factories.



RAIL STEEL PRODUCTS

Rounds, squares, octagons, flats, grooved flats, angles, channels, diamonds, tee bars, beaded flats, channel flats, U harrow bars, I bars and cultivator beams—all rolled from rail stock.



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Republic's Berger Mfg. division has extensive facilities for contract fabricating. Here Republic builds for others such items as voting machines and incubators, ships' furniture, work benches and water coolers, cabinets and jackets of many kinds.

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ore mines here and abroad; lake and ocean-going ships; coal mines; furnaces and huge steel mills, North and South; steel fabricating plants across the nation and in Canada; sales offices in principal cities; PLUS 70,000 men and women working together to produce steels and steel products to help build and protect a stronger America.

LOCAL BUSINESS



Back Yard Choo-Choo

COLUMBUS — The powerful little locomotive in the picture above is all steamed up with no place to go. Without turning a wheel, this puffing engine is providing emergency steam power for Loroco Industries, Inc., a Lancaster, Ohio, paper manufacturing concern.

A recent storm knocked out Loroco's steam generators by toppling three 75-ft. stacks, causing \$100,000 damage. To keep the company in operation, the engine was wheeled into place and a 45-ft. stack was placed on top. Other plants in the area would like to set up locomotives in their back yards for emergency power, too—but Choo-Choos are kind of hard to find these days.

Bank Preserves

MINNEAPOLIS — "A bank is not able to shoulder a gun but it has the right to own shooting and hunting privileges on a farm." So ruled the Minnesota Supreme Court last week in a 4-to-2 decision in favor of Fergus Falls National Bank.

The "shootin' iron" hassle started when the bank foreclosed a 134-acre farm in Western, Minn., near Fergus Falls in 1933, during the Depression. The bank became the owner of the land after the foreclosure, finally sold it to Anton Hanson, but reserved the hunting rights. The rights were sold to one of the bank's cashiers. Hanson claimed he should have all the privileges of the land.

Associate Justice Frank T. Gallagher agreed with Hanson that a bank could

not use the hunting rights it reserved since it could not shoulder a gun, but added "it does not follow that it may not segregate and own valuable property interests." Gallagher explained that many farms have hunting rights worth more than the land, but that if farmers were deprived of the privilege of selling the rights, they would lose a large source of annual income.

Salty Suit

BATON ROUGE — A suit filed against Jefferson Lake Sulphur Co. last week in Federal District Court could very well challenge the constitutionality of every bill passed by the Louisiana legislature since 1951.

The action was aimed at a 1954 act that approved an award of \$896,465 to Jefferson Lake. The original judgment was made when Jefferson Lake shared a lake property with the state. The state sued a salt firm for extracting salt from the lake's bottom, and Jefferson Lake sued the state for its share.

James A. McCummin, a former state representative, filed the suit to halt payment to Jefferson Lake "as an interested taxpayer." His petition alleges that the U. S. Constitution guarantee of equal rights was violated in passage of the act because (1) the legislature was an illegal body, since there has been no apportionment since the 1950 census although reapportionment after a federal census is a constitutional mandate; and (2) reading in full, required of all bills, was not given the Jefferson Lake act prior to passage.

City Strikes Oil

DEER PARK, TEX. — A Texas Supreme Court ruling last week really put this small city in the chips. The decision, against Shell Oil Co., raised Deer Park tax valuations from \$200,000 to \$37-million.

Here is what happened: Deer Park, on the outskirts of Houston, annexed the plant site of Shell. Shell officials vigorously protested that they would be paying 98% of the city's taxes for nothing. They claimed that Deer Park could not offer the necessary fire and police protection and other benefits to warrant tax payments.

The high court ruled that the annexation was in order since Deer Park surrounded Shell and the plant site was formerly unincorporated. As soon as the decision was made public, Mayor Earl Dunn claimed the tax on the \$37-million valuation. Through the long fight, Shell had been setting the money



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G 390



Timber Structures benefits day-in, day-out, by Gerlinger cost-cut handling. Longer wheelbase and larger tires on fork lift truck insure positive maneuverability at all times regardless of adverse weather conditions or load differences.

Timber Structures management and operators alike praise the Gerlinger. The plant keeps 5 fork lift trucks and 3 material carriers busy inside and out every shift. Individually, or as a team, Gerlinger heavy-duty material handlers lead the field.

Fleet of 8 Performs "MIRACLES" in Versatile Operations for Timber Structures, Inc., Portland, Oregon

"When it's a big job in a hurry...and safety is a prime factor...we've come to depend more and more on our Gerlinger equipment!" Timber Structures' Gerlinger fork lift trucks gave emphatic demonstration of these words of Mr. R. W. Mayer, assistant general manager, in a dramatic undertaking which involved the loading of five gigantic laminated wood beams.

And just why is a Gerlinger fork lift truck able to make routine work of picking up and loading on truck and dolly unwieldy 104-foot laminated beams, each containing 10,164 board feet of lumber and each weighing between 16,000 and 17,000 pounds? Exclusive counter-active weight distribution is part of the answer where variance in load weights and dimensions are concerned. A Gerlinger won't teeter, or back wheels dig in...54% of truck's weight is where it's needed...over front wheels...for maximum traction and easy maneuverability.

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aside for payment if the decision required it.

Dunn estimated that the city tax on Shell's property will amount to \$100,000 annually. He graciously told company officials that he would collect \$26,000 from Deer Park citizens—so Shell would only have to pay about 80% of the tax burden instead of the original 98%.

Beauty on the Block

MILWAUKEE—As a rule, zoning ordinances and building ordinances are designed to protect the health, safety, morals, and general welfare of a community. But in Fox Point Village, the only building restriction was based on esthetic values.

Last week Fox Point citizens lost their esthetic sensitivity as far as building codes were concerned. Their zoning ordinance was declared unconstitutional by a circuit court. Judge Leo B. Hanley said the law was "arbitrary and unreasonable," and that Fox Point Village "clearly exceeded the bounds of legislative discretion."

The ordinance set up a building board to examine blueprints and recommend or deny a building permit on the ground of exterior architectural appeal. The test case came up last April, when a building firm tried to erect one of its standard plan brick houses with attached garage. The permit was denied on the grounds that the building was out of keeping with its immediate neighborhood. The judge pointed to the "immediate neighborhood" section of the code, saying, "It is elastic and abstract—open to varying interpretation."

Sheepish Note

CLEMSON, S. C.—As the swallows return to Capistrano, so the sheep may return to South Carolina. If a program recently launched by Clemson College is successful, old-time South Carolinians may once again hear the familiar bleat of sheep.

The sound died out in 1930, with only a handful of farmers keeping sheep. L. V. Starkey, head of the animal husbandry school at Clemson, said that "the interest in reviving sheep raising was occasioned by the advent of wool processing and manufacturing in the South." He added that many textile manufacturers are moving their production of wool into the state because of the good labor market.

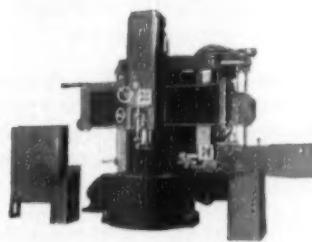
Manufacturers were invited to a meeting at the college to discuss the possibility of a cooperative program for sheep raising. Among those attending was Arthur Wellman, president of Wellman Combing Co., which opened a new plant nearby.



Fisherman's Wharf

FPG Photo

BULLARD



**Bullard Vertical
Chucking Grinder**

The Invisible Background of Industrial Progress . . .

Modern fishing fleets are no longer dependent on the winds for motive power—they are propelled by gasoline or Diesel engines traveling far and wide with the ever-changing schools of fish enabling the modern fisherman to make larger "catches" in shorter periods of time. Many of the boats have mechanical handling for the unwieldy fishing gear, and have refrigeration units to keep their "catch" fresh for market delivery.

Furthermore, canneries and processing plants employ modern methods with mechanical handling and packing equipment to bring the packaged product to your table ocean fresh.

All of this equipment, from the boats in the fishing fleet to that in the cannery, is made possible by *Modern Machine Tools*—“The Invisible Background of Industrial Progress.”



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For over 25 years Mallory metallurgical engineering has been a leading factor in the development of resistance welding materials and techniques.

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Mallory metallurgical research has also pioneered in developments outside the resistance welding field to produce special contacts in every kind of electrical device . . . special metals for gyroscope rotors and for shielding radioactive materials, to name a few results of this specialized work.

Such work is behind all Mallory products and processes not only in metallurgy but in electronics and electrochemistry. It is the reason manufacturers intent on improving their product performance, so often turn to Mallory.

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PERSONAL BUSINESS

BUSINESS WEEK
AUG. 14, 1954



Many executives feel that their emotions are not the doctor's business. They are. Developments in the field of psychosomatic medicine prove that conclusively.

If your physician wants to know about your state of mind, tell him. Don't stop talking after you've given a description of your physical symptoms. His knowledge of your personal problems—domestic or business-wise—will help him prescribe for your illness and may prevent permanent organic damage.

This viewpoint is not new; the term that describes it, "psychosomatic," is. The fact that "psyche" (mind) and "soma" (body) affect each other has seldom been disputed by physicians. But for a brief time the idea of treating the whole man—emotions and all—got a little rusty. Specialists, preoccupied with particular areas of the body, increased.

Now the medical specialty of psychiatry (along with physiological research) has brought this approach back—and on a scientific basis. Today the medical profession works with this fact well in the foreground: The body cannot be treated as separate from the mind.

There is hardly an illness unaffected by your mental attitude: toward the disease, yourself, the people and situations you have to live with.

For example: Maybe it really was something you ate that upset your stomach. But, if that is true, your outlook on life can turn sour as a result.

More likely, your stomach may be upset because you're thoroughly "fed up" with something. And it has nothing to do with what you have eaten. It's the chronic combination of a negative attitude plus an uncomfortable body that leads to psychosomatic illness.

This is why it's important to get your physician's advice when emotional distress becomes chronic and increasingly severe.

Relief for acute, sustained emotional problems is just as vital as relief for those physical symptoms that are the usual reason for a visit to the doctor.

Repeated emotional upsets—if they occur over a long-enough period of time—may ultimately lead to organic damage.

Thus your stomach trouble may be diagnosed as appendicitis, bacterial food poisoning, or other clear-cut physical illnesses. Or your doctor may find it is, in part or entirely, due to anxiety. His prescription will depend on whichever it is.

Dr. J. A. Winter in "Are Your Troubles Psychosomatic?" (Popular Library, 25¢; Julian Press, \$3.50) states that anxiety succeeds in accomplishing one thing: the eventual destruction of both mind and body.

"You are the best judge of whether you are anxious and worried and full of nervous tension. You can tell because you are doing less, getting less, and are much less comfortable. In illness like this, when you see the doctor, only you can help the doctor.

"In the final analysis of anxiety, you are the doctor."

Very often, these are the cases a physical examination can't account for. What's more, drugs and surgery are of little use. The reason: To all appear-

PERSONAL BUSINESS (Continued)

BUSINESS WEEK
AUG. 14, 1954

ances, the patient is in good shape. There's no disease to prescribe medication for; no organic damage to remedy by an operation.

In such cases, the physician must know more about his patient. He'll have to find out the emotions supporting the symptoms. He'll work to relieve the emotional, rather than the physical, distress.

But the purpose will be the same whether the prescription is surgery, medication, psychotherapy (or a combination): to help you feel better.

—•—
Most people read at one-half or less the rate they could. Fast readers use the sense of sight alone. But, if you're like most readers, you attempt to say and hear the words as well, just as you learned in grammar school.

These well-fixed habits limit you to a rate of about 250 words a minute—on par with speech—which doesn't automatically speed up with experience. The word-by-word reader doesn't comprehend any better, either. The fast reader picks up connected, easily remembered thought units, has fewer concepts to assemble.

If you've got more reading than you can handle, these suggestions may be helpful. They're from The Reading Laboratory, Inc.'s better-reading course.

- **Consciously speed up** your reading. Make fewer and faster stops at each line of print.
- Instead of taking in one or two words at a time, try picking up word clusters (up to 5 or 6 words) with each glance.
- **Pre-read everything.** Avoid "one-gaitedness." Not all reading matter merits equal concentration. A quick look-over, taking advantage of chapter, paragraph headings, headlines, will help you judge the value of the material, perhaps find parts that can be skipped entirely.

—•—
Active reservists should check their records before making uniform expenditures on their own. They may be entitled to a uniform allowance.

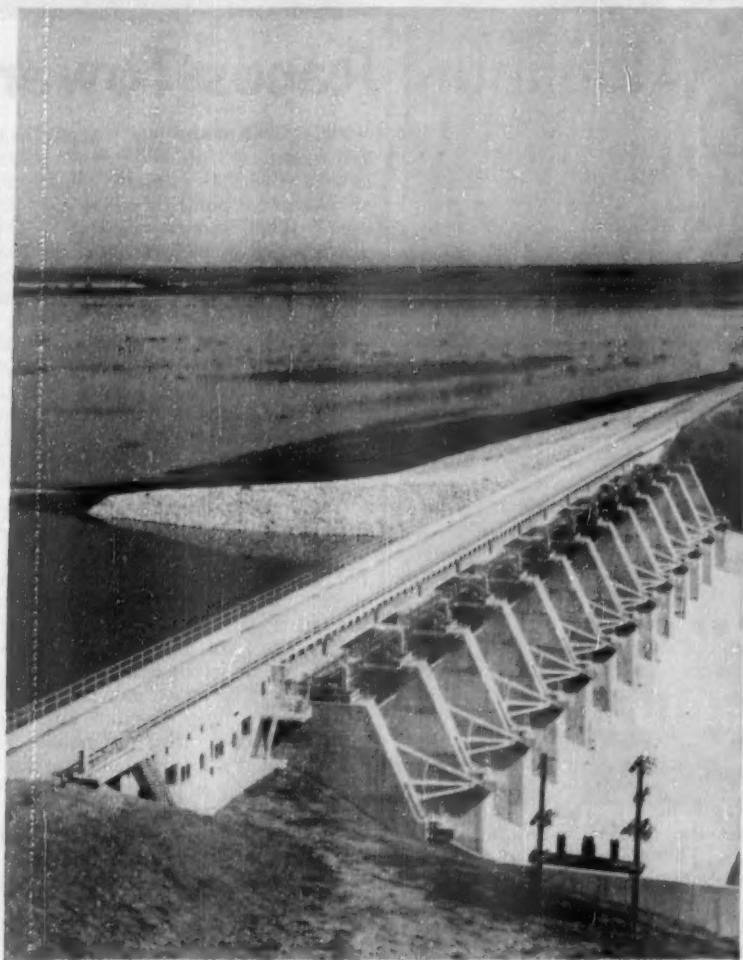
Qualifications for this \$50 allowance are: (1) four years of satisfactory service; (2) two weeks' active duty each year during the four-year period; and (3) 50-credit minimum for each year in a reserve activity requiring the use of a uniform.

To total up the credits: You get 15 points for becoming a reservist. Then count 15 points for each two weeks of active duty a year. Add to that 1 point for each one-day weekly reserve session you attended.

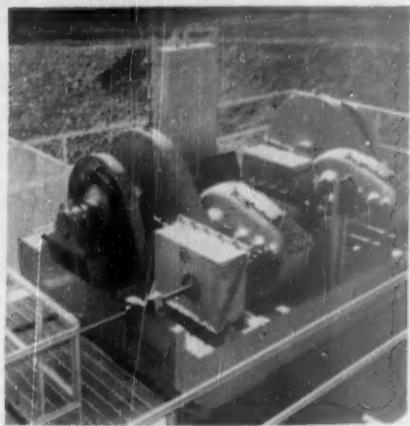
—•—
If you own a painting, you'll be glad to own "How To Take Care Of Your Pictures" by Caroline K. Keck. Published by The Museum of Modern Art and The Brooklyn Museum (\$1.95), it covers prevention, first aid, and cure for just about any disaster that could befall your painting—plus good advice on such topics as restoring, cleaning, hanging.

—•—
Here's a unique going-away present for friends off on a tour to Italy: Italian 23 Plan dinner tickets, available at travel agencies.

At \$3.75 each, a ticket entitles the bearer to a dinner at any of 23 Italian restaurants in eight principal cities.



Gate drives at Lavon Dam include Link-Belt parallel shaft and worm gear drives as well as roller bearing pillow blocks. Caldwell Foundry & Machine Co., Birmingham, Ala., furnished the twelve hoists.



At Lavon Dam, Link-Belt enclosed gear drives and bearings help
provide flood protection and
water conservation for north Texas

TO control the whims of the Trinity River, the U. S. Army Corps of Engineers is building a network of dams. One of these—Lavon Dam across the Trinity's East Fork—provides water supply for ten north Texas towns and protects 50,000 acres of farmland downstream from floods.

Power to raise and lower 40 x 28 ft. gates in Lavon's spillway section is supplied through Link-Belt enclosed gear drives and roller bearings. This efficient power transmission equipment was selected for its proved ability to maintain year in, year out dependability under all types of atmospheric conditions.

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PRODUCTION

Aluminum Races Toward

Promptly at 6 a.m. on a hot day last June, 40 specially trained men began walling in a 22-story skeleton skyscraper on New York's Park Avenue. By 4 p.m., the two sides facing the street had been completely covered with prefabricated aluminum panels (picture). The job had cost nearly \$1-million—as much as a brick facade—but the work had been completed in 9½ working hours instead of a normal two months.

The new skyscraper is a milestone in construction history. But it is also dramatic evidence of the progress aluminum has made in civilian markets, particularly in the past year. Even while the Tishman building was going up in New York, at least 50 other aluminum-clad skyscrapers were in various stages of construction around the country.

• **The Figures**—One major aluminum producer estimates that the building trades now take about 19% of all aluminum available as contrasted with about 8% in 1939. This figure is even more impressive when you consider that total basic aluminum consumption was 1,252,013 tons last year (exclusive of stockpile needs). That is roughly eight times the 163,545 tons consumed in 1939. This means that the amount of aluminum going into construction items—roofing, gutters, nails, storm windows, and the like—is now 18 times what it was prewar; and it keeps on increasing.

• **New Developments**—But construction isn't the only industry where aluminum is forging ahead. Collapsible chairs, portable barbecues, and countless other indoor-outdoor gadgets have taken the suburbs by storm. Lightweight aluminum jewelry is gaining popularity. And aluminum foil is one of the hottest items in the burgeoning packaging field.

It may seem a far cry from a New York skyscraper to a bracelet, a porch chair, or a frozen chicken pie; but these items add up to a major trend. They reflect a basic readjustment in the aluminum industry. For the first time in more than a decade, aluminum is being fed into the civilian market in sizable quantities.

The shift started about a year ago. Up until then, the bulk of aluminum available had been earmarked for defense. But as the metal became more available, the industry began to revive dormant civilian uses, develop new applications, and to educate the public on the virtues of a material that had been scarce since 1940. During that period, too, the industry itself had altered considerably.

• **King Civilian**—As one big producer said recently, "Until the defense boom tapered off last summer, aluminum salesmen were primarily public relations men." They had to break the news gently to their civilian customers and potential civilian customers that they had practically no aluminum to throw their way.

Now the picture is reversed. The civilian customer is king. A lot of peacetime uses, which were allowed to slip by the board in the days of short supply, are being pulled back. Nothing is too small to warrant fatherly concern by the basic aluminum producers.

Take the transportation industry. During the war years, it gobbled up as much as 65% of all aluminum available, but the biggest gobbler was the airplane. Occasionally there were other spectacular transportation uses such as the Talgo train and the SS United States, but in recent years the automobile industry has shied away from engineering any huge amount into any particular model. Most automobiles use only about 15 lb. of aluminum each for such things as pistons, wheel hubs, various struts, and angles.

It wasn't always so. In the early days of the horseless carriage, aluminum was widely used for flywheel and rear-axle housings, transmission cases, clutch components, oil pans. The 1903 Pierce-Arrow, Franklin, Peerless, and Jordan all had aluminum bodies. The industry now has set out to regain some of this lost territory.

• **Branching Out**—In the last decade, the industry has broadened both in production capacity and in number of suppliers. This growth tends to minimize the objections of some mass producers who were leery about working with only one supplier. At the same time, research has come up with many new alloys and fabricating techniques that make aluminum much easier to work with. Larger extrusion presses and larger die-casting machines are now producing parts that formerly had to be assembled from smaller components.

All of these developments make the automobile an important factor in the future of aluminum. If the industry succeeds in getting more aluminum into each automobile, aluminum's peacetime future is assured. There are practically no pessimists among the basic producers—only varying forms of optimists. They cheer as automakers try out aluminum dashboards, aluminum floorboards, aluminum windows, aluminum trim, or whenever anyone mentions aluminum cylinder blocks.



ALUMINUM-CLAD skyscraper in New York is only one of many showing how far the metal has come.

New Markets

• **Sales Talk**—Aluminum's big selling points are its strength, light weight, and corrosion resistance. The latter is important in many jobs. In the oil-producing Southwest, for instance, it has helped aluminum get into pipe and all sorts of equipment designed to end corrosion problems for the petroleum and chemical industries. More and more aluminum is going into portable drilling rigs, casings, tubing, storage tanks, drums.

It was a tough job to shift emphasis from defense to civilian in just one year. The first problem was the general softening of the civilian economy at the time that defense contracts were being cut back. Meanwhile, production was expanding as more and more metal became available from new plants. Right now, aluminum production capacity is about twice what it was in 1950.

• **Stockpile**—Aluminum was fortunate all through the readjustment period in that it had the national stockpile to take up some of the slack. The Aluminum Assn. reported last week that basic production for the first half totaled 1.4-billion lb., an increase of 20% over the same period last year and almost as much as was produced during 1950. Records were broken in both quarters this year and there's a good chance they'll be broken again in the third quarter as the second round of expansions nears completion.

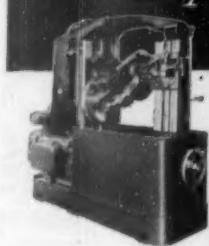
For security reasons, no one will say exactly how much aluminum is going into the stockpile. However, a drop in profits of the big three aluminum producers (Aluminum Co. of America, Reynolds Metals Co., and Kaiser Aluminum & Chemical Corp.) during the first half indicates that it's considerable. That's because profit margins on pigs and ingots sold to the government are narrower than they are on the fancy mill products sold to defense contractors and civilian customers.

• **Prewar Roots**—Reasons for the aluminum stockpile go back a long way, to the prewar period when Alcoa was the only producer. Aluminum is the most plentiful metal there is, but it's so closely tied to other elements in nature that it requires a fantastically large plant investment and a lot of time to get reducing units set up and operating. Alcoa's contention in the anti-trust days was that it had a monopoly by default; the return on investment was too small to attract other producers.

The government helped Reynolds in 1941 and Kaiser in 1946 over the rough spots to set up as basic producers. The



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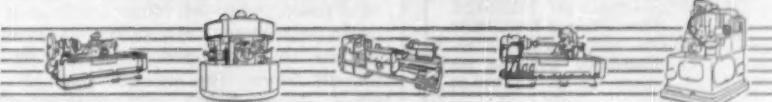
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idea was to broaden the base of supply for an emergency, and to stockpile enough material to keep the defense program rolling until more producers got going.

• **New Entries**—After the war, the government was still worried about a shortage of aluminum. It set out to lure others into the business. Anaconda Copper Mining Co. was the first to get cracking. Its plant should hit top speed late this year. Harvey Machine Co., Inc., a major fabricator of the metal, actually predated Anaconda. But talk in the trade indicates that the Harvey plant has not progressed much further than setting up a construction headquarters at the site.

Olin Industries, Inc., and Wheland Co., two others included in the third round of expansions, have hit snags. While there's no official word from Washington that the third round of expansions is off, the trade doubts that these two newcomers will enter the basic aluminum picture in the near future.

A growing factor in the domestic aluminum business—and perhaps a reason why the government's enthusiasm for bringing newcomers into the field has waned—is Aluminum Ltd. Its big Canadian subsidiary, currently running neck-and-neck with Alcoa for the title of world's largest producer, will probably move into the lead again when Kitimat (opened last week) hits its stride. Aluminum hopes to sell a good part of its metal in this country. It has a low-cost operation and, even with the tariff, is competitive.

The expansions of Alcoa, Reynolds, Kaiser, and Anaconda, plus the availability of more Canadian aluminum, reduce the possibility of a shortage of the metal. It also lessens the need for an enormous stockpile. While the stockpile is currently an important market, the industry realizes it can't go on feeding it indefinitely.

• **Defense**—Until the government started to cut back a year ago, defense was aluminum's big market. During Korea, the military take was so big that basic producers talked Washington into reducing amounts going into the stockpile. That is another reason why the industry came out so well during the readjustment.

• **Royal Touch**—Historically, aluminum and defense are very closely connected. One of the first items ever fabricated of aluminum was a helmet for the King of Denmark. The father of commercial aluminum probably was Napoleon III of France, who felt that his armies could outmaneuver any power on earth if they were equipped with light aluminum armor. This was 100 years ago, when aluminum was still in the precious metal class. Napoleon III himself ate with aluminum cutlery, while

lesser nobles had to be content with gold.

The same Napoleon endowed a French scientist, Saint-Glaire Deville, with a fortune to find a commercial process for producing the metal. Deville devoted his life to the task, but never found the solution. However, his discoveries laid the groundwork for modern commercial methods.

• **Future**—The dreams of Deville and his successors began to take form around the turn of the century, when aluminum found its way into such things as souvenir combs, soap boxes, and other knickknacks. Later, aluminum pots and pans, electrical wiring kept the material in the public eye until the airplane lifted it into the big time.

While aluminum seems finally out of the feast-or-famine period as far as civilian markets go, the industry is banking on new applications, low price, and assured supply to attract more mass producers. Aluminum is cheaper than competitive materials such as copper and stainless steel. In spite of eight price hikes since 1948, aluminum is now merely back at its prewar selling price—partly due to a big drop in price at the end of the war. It's a record the industry is very proud of, since few other materials come close to holding the line.



Parts Supermarket

To cut down on stockroom overhead, Lockheed Aircraft Corp. is expanding its parts supermarket system, under which workers help themselves to parts as needed. After a year's trial of the system at the B-47 assembly plant in Marietta, Ga., Lockheed figures savings will come to about \$250,000, including 25% saving in stockroom personnel and a saving of 60,000 sq. ft. of floor space.

Technologists Get a New Monthly

Control Engineering, a McGraw-Hill publication, latest magazine pitched to problems of automatic control.

Next week, McGraw-Hill Publishing Co., publishers of **BUSINESS WEEK**, will introduce another magazine for industry. The new publication, titled **Control Engineering**, will cover a new and growing kind of technology.

In the past five years, industry has become more and more aware of the need for increased mechanization in its plant operations. This mechanization is usually described by such popular terms as robot factory, automation, cybernetics. But in reality, technology is a lot more mature today than those science fiction-like terms imply.

• **The Pitch**—Industries such as petroleum, chemicals, and food processing have shown the greatest and fastest advances in mechanization. Take a look at one of their big modern plants, and you'll find very few employees' cars parked on the plant lot. A processing plant today needs little human help. This shift is catching on in other fields—fields that are diverse and dissimilar. Atomic energy, traffic control on railroads, auto engine production, and computers for firing antiaircraft guns are shining examples.

Control Engineering will report on this important new technology, both in a broad and a detailed way. The magazine, a monthly, makes its pitch to a highly professional 15,000 subscribers. The first issue will contain 140 pages, half of which is editorial material.

• **Growing Field**—But **Control Engineering** won't be alone in the field. Lately there has been a flurry of new magazines edited especially for technology:

• The **ISA Journal**, published by the Instrument Society of America, Pittsburgh.

• **Instruments & Automation**, Instruments Publishing Co., Pittsburgh.

• **Automatic Control**, Reinhold Publishing Co., New York City.

• **Automation**, Penton Publishing Co., Cleveland.

• **Wide Appeal**—**Control Engineering** will try to attract the company brass as well as the firm's technical personnel. There is an outlook section covering the field's broad phases such as business trends and economics.

For the technical man, the articles are written by staff and industry experts. Two examples in the first issue: David Rubinfiel, head of Armour Research Foundation's computer work, tells what electronic computers hold for industry in the future. Another gives a rundown on the automatic controls used to regulate an atomic pile.

Neither of these articles was written strictly for a computer or atomic engineer. **CE's** staff feels that they might be idea pieces for engineers whose specialties are foreign to computers or atomics. Ordinarily, a description of a bomber's fire-control mechanism would have a limited utility. But given a broad engineering pitch it could spark an idea on a motor control for a technician designing a new textile machine.



It Makes Transistors, Thousands at a Clip

The device pictured above is General Electric Co.'s answer to the problem of making transistors in a hurry. Using this process, the company expects its Syracuse (N.Y.) plant later this year to be mass-producing these tiny gadgets that can do the work of vacuum tubes.

GE's new method could be just the thing the electronics industry has been waiting for since the first transistor was born at Bell Laboratories about six years ago. Up to now, transistors haven't been replacing the old stand-by vacuum tubes as fast as some industry people thought they would—for one reason: They have been difficult to produce in volume.

• **Fast Worker**—GE's new mass-production technique starts out with a cylindrical crucible of molten germanium metal (at bottom of picture) that has had a slight impurity added to it.

A 6-in.-long bar of germanium is lowered into the crucible. As it is slowly pulled out, the molten germanium adheres to it. By the time it's all the way out, it has become an irregular-



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shaped 4-oz. ingot (seen in the picture suspended just above the cylinder).

The ingot is cut up into 2,000 tiny parts—each part becoming the guts of a transistor. Each is .020-in. square, .1-in. long. When some leads have been attached, each transistor is capped, sealed, and is ready to go to work.

• Millions—GE thinks its new process will make a big change in the industry picture—though not right away. Last year, only a couple of million transistors were produced in the U.S., while vacuum tube production exceeded 400-million units. By 1957, GE expects its transistor business to reach \$10-million to \$20-million in value, or 5-million to 10-million units a year. By 1963, GE thinks it will be making 70-million transistors in a year.

• Hurdles—Three main factors have held transistors to a slow start despite their many advantages over vacuum tubes. The inability to turn out millions of transistors of consistently high quality has kept the price high—around \$10 per unit, compared with a dollar or so for a vacuum tube. And it has been difficult to get transistors to work well at high frequencies and high temperatures—as tubes will. (GE says its new process gets over this hurdle, too.)

Finally, circuits in radios, TV sets, transmitters, etc., are designed for vacuum tubes. Manufacturers don't want to redesign for transistors until they know the tiny newcomers will do an equivalent job.

When set manufacturers are convinced, GE figures they will use more and more transistors for such items as clock-radios, portables, table model radio and TV sets. GE is optimistic enough to estimate that annual U.S. production of transistors may be as high as 350-million by 1963.

PRODUCTION BRIEFS

The Air Force's YC-130, the first U.S. turboprop military transport, was displayed last week by Lockheed Aircraft. The plane can carry a 20-ton tank, and can fly higher and faster than any existing military cargo plane.

Tetraethyl lead (the gasoline additive) and freon (the gas that makes refrigerators cold) will be manufactured at du Pont's first big plant in California. The company said last week that it had picked the site, and expects to start construction soon.

Ice formations on the wings of high-speed aircraft will be studied by the Air Force, which is setting up a special wind tunnel at Illinois Institute of Technology, Chicago.

NEW PRODUCTS



Pigmy Power Shovel

The Clark Equipment Co. says that its new power shovel (above) is smaller than any machine of its kind on the market. This makes it especially suitable for working in close quarters. Also, the company says that its price—\$3,650—is about \$300 under similar shovels.

The Bulk Master has a capacity of 1,200 lb. It can handle grain, sand, fertilizer, chemicals—almost any bulk material. But it is not powerful enough to dig into hard-packed clay.

It is powered by a 4-cylinder gas engine and can carry a full load up a 14% grade. It is 109 in. long, 46 in. wide, and has an outside turning radius of 73 in.

• Source: Clark Equipment Co., Industrial Truck Div., Battle Creek, Mich.



Flour Through the Hose

The International Milling Co. is using the big trailer (above) to deliver flour from its Detroit mill. It can handle 40,000 lb. of flour on a single de-

livery and can unload into a baker's bins at the rate of 800 lb. per min.

Air pressure is the secret of the system. Compressed air is forced into the trailer through air slides on its floor. This blows the flour out through the rubber hose and into the bin.

The driver can unload in 50 min. Before the trailer went to work, the same job took 12 man-hours, because the flour was handled in 100-lb. bags.

International Milling is not selling the units. It built this one to its own specifications, hooked it onto the GMC cab. It expects to add more units to its system throughout the U.S.

• Source: General Motors Corp. Truck & Coach Div., Pontiac, Mich.

NEW PRODUCTS BRIEFS

To protect smooth surfaces during storage and fabrication, Minnesota Mining & Mfg. Co., St. Paul, Minn., has developed a paper-backed tape that is said to be entirely resistant to outdoor weathering for periods up to six months.

Curtiss-Wright Corp.'s electronics division Wood-Ridge, N. J., has developed a device that makes it possible to reduce 24 hr. of air flight training to 2 hr. 24 min. One unit has been shipped to the Fairchild Air Force Base, Spokane, Wash.

Highway signs of vinyl plastic are being produced by Seiberling Rubber Co., Akron. Unlike conventional metal signs, these are said to be unaffected by sun, rain, snow, or temperature changes.

Radioactive silicones: General Electric Co.'s Silicone Products Dept., Waterford, N. Y., and Abbott Laboratories, North Chicago, Ill., have completed a joint project that will make radioactive silicones available for medicine and industry.

A new type storage battery for electric industrial trucks was announced last week by the Edison Storage Battery Div. of Thomas A. Edison, Inc., West Orange, N. J. The battery supplies more capacity relative to its size than any other Edison nickel-iron-alkaline storage battery.

A liquid car polish that contains nylon has been introduced by the Nylwax Corp., 4 Judson Rd., Worcester, Mass. Nylon suspended in the liquid wax gives a harder, longer-lasting finish, the company claims.

A GUIDE TO MODERN MANAGEMENT METHODS

Just Published

How do American corporations pick good managers... build smooth labor relations... insure steadier profits? Fortune magazine looked at these questions, came up with a series of articles revealing new management tools in use today, and how they are working in specific companies. Expanded into book form, they help you see more clearly what is being done in the way of executive development, counseling, planning, communications, industrial relations, and the like. The book appraises facts frankly... uses them to sharpen the perspective on your problems. By **Perrin Stryker and the Editors of Fortune**, 200 pp., \$3.50

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A searching report on the state of selling in America—enlarged from a famous series of Fortune articles—that's packed with ideas for making selling a more live and resultful force in your organization. It tells just what makes the sales wheels go 'round and what businessmen are doing, and not doing, to make selling a more potent economic force. Examines in detail the types of salesmen, sales philosophies, sales practices, and the attitudes of businessmen and the public towards selling. By the Editors of Fortune, 200 pp., \$3.50

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Twenty experts present specific guidance on management policies and

methods to help the business owner, manager, or executive handle such operations as starting or buying a business, financing it, setting up a distribution system, installing cost control, handling marketing and public relations, etc. Brings procedures proved successful in starting businesses, keeping them going, and making them grow with profit. Edited by **J. K. Lasser**, formerly Adjunct Professor and Chairman, Institute on Federal Taxation, New York University. Prepared by a Staff of Specialists. 800 pages, \$8.50

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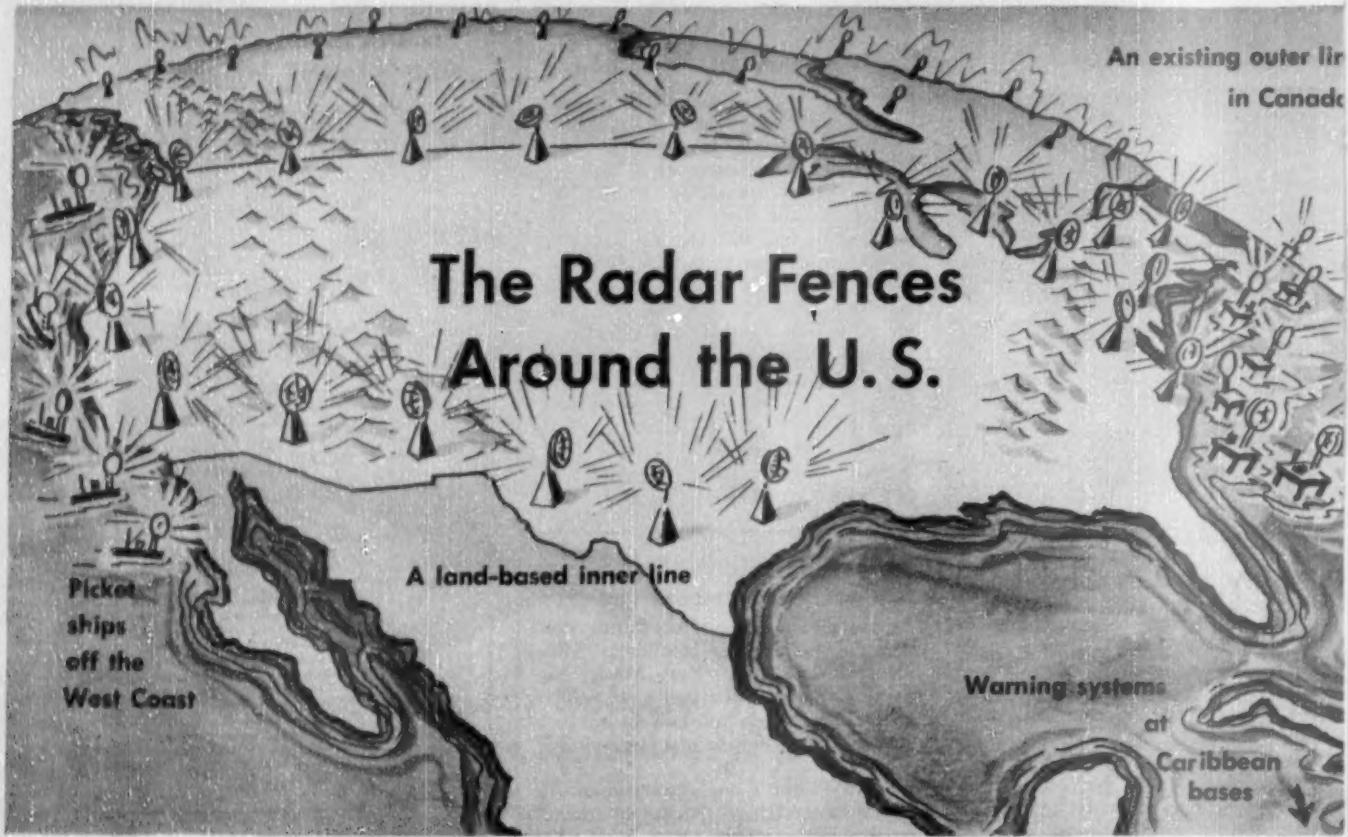
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MUNITIONS



The Gaps Are Being Filled II

As these illustrations show, the U.S. is grimly and busily fencing itself in with a vast radar system to warn of approaching enemy aircraft. Two developments last week indicated just how grimly and busily this work is being done:

- The Pentagon was busily at work, *BUSINESS WEEK* learned, on a string of radar platforms soon to be built off the Atlantic Coast.

- Defense Secy. Charles E. Wilson announced establishment of a single Continental Air Defense Command, to take charge of all internal defense forces and machinery—including the radar system.

Congress is approving extra money for radar construction, and plans are already being made for 485 more stations around the continent. The military hopes to have a fairly complete, integrated radar organization by Sept. 1; it hopes to have the system in full operation by 1957.

The Air Force feels that even today it is virtually impossible for any aircraft to make an unidentified approach over this nation's shores or borders. Indeed, it is virtually impossible to fly an un-

identified course over many sections of the country—and highly dangerous to fly unannounced into security areas.

- **Philosophy**—Just how adequate a warning system we need has been an ongoing debate in military and Administration offices for a long time. Indeed, the nub of the argument has been whether we should have a defense system of any consequence at all. Intercontinental bomber advocates have long boasted that the power to obliterate Soviet targets would in itself defend the country. The Strategic Air Command of Gen. Curtis LeMay, geared principally for offense, has through the years got the bulk of Air Force money, at the expense of defensive planes and air defense measures.

But Russia's development of the atom bomb, and its later break into the secret of the hydrogen bomb, have had their effects. The idea of a radar network has gained new importance.

- **Setup**—Control of this sleepless, around-the-clock guard by the Army, Navy, and Air Force will emanate from Colorado Springs, present headquarters of the Air Defense Command. ADC's Gen. Benjamin W. Chidlaw, appointed

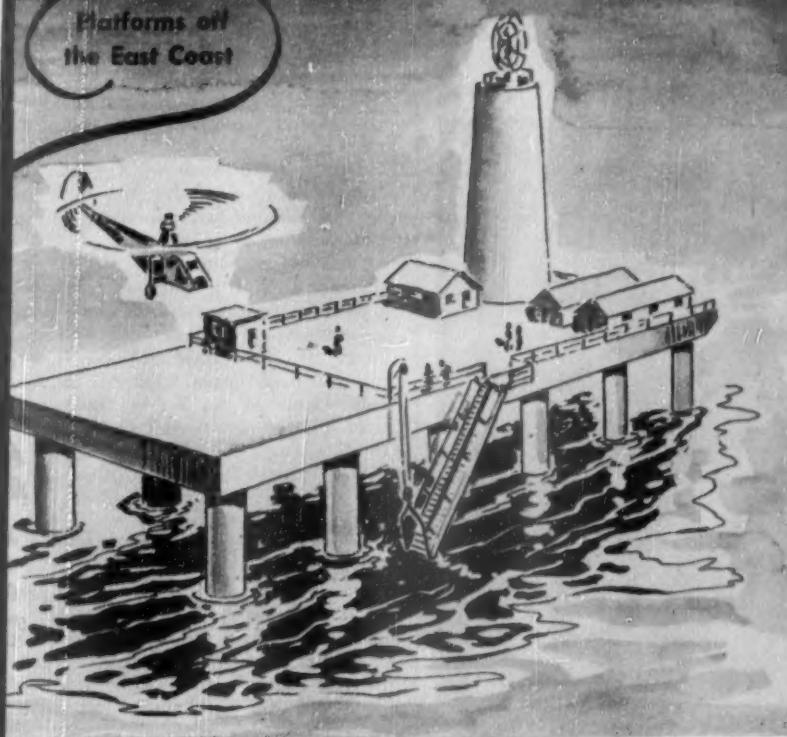
last week to head up continental defense for all services, will gather in the reins of the Army's nationwide anti-aircraft system—including the Nike missile establishments (BW—May 8 '54, p108) and the Navy's seagoing interceptors and radar warning devices.

The Army and Navy will continue to operate their own outfits, but Gen. Chidlaw will be their boss—in effect, a theater commander.

- **Progress**—For some years the Air Force has quietly been spinning a vast warning web from San Diego northward to Seattle, across to Maine, along the country's northern boundary and thence south to the tip of Florida.

In the last five years the Air Force has been building installations to house search radars and their operators. By 1957, the Air Force will have spent some \$750-million in construction alone. Total cost, including installation of electronic and other equipment, will be between \$3-billion and \$5-billion.

This year, another \$110-million will be used to enlarge on what is already built, and a beginning will be made on 485 new stations.



Hi-Fast

• **Texas Towers**—The Atlantic Coast program is one of the new developments. This calls for huge platforms to be installed off the coast, as far out as 125 miles, to detect enemy action. The idea for the platforms was borrowed from offshore oil drilling in the Gulf of Mexico; for this reason, the radar stations are dubbed "Texas towers." The shallow coastal waters and the many underwater mountains are hoped to be suitable for the towers.

De Long Engineering & Construction Co. and Raymond Concrete Pile Co., both of New York, are making core drilling tests at various points in the Atlantic to find suitable tower locations.

The platforms will be built on land, then barged out to their locations, raised hydraulically, and secured. Cost of building the towers will run between \$15-million and \$20-million, not including the equipment.

Each of the platforms will contain complete living quarters, recreational facilities, maintenance rooms, and sick bays for 20 to 30 operating personnel. The deck will also provide a landing area for helicopters. Rising off the platform will be a tall tower, in appearance

much like a conventional lighthouse.

Cap of the tower, however, will look much like the control tower of an airport. Its equipment will be powerful radars and weather forecasting devices.

• **On Land**—The \$110-million the Air Force will spend this year will complement the Texas towers by filling in with additional land-based radar stations. There are already hundreds of small permanent radars sprinkled across the nation. The heaviest concentrations are near the big population centers, the coasts, and the U.S. borders.

These are midget military posts, complete with housing for servicemen and their families. Congress is voting money this year for construction of several hundred housing units.

Each of these stations occupies some 30 to 40 acres of land, accommodates from 12 to 16 officers and 108 to 179 airmen.

In addition, the Air Force is building some automatic stations, called "gap fillers." These operate unmanned. They are located between major installations to fill in blind spots in the big radars' scan—between mountains, for instance, or behind urban skylines.

A third major system of defense is being raised off the Pacific Coast. There, the ocean floor is too far down

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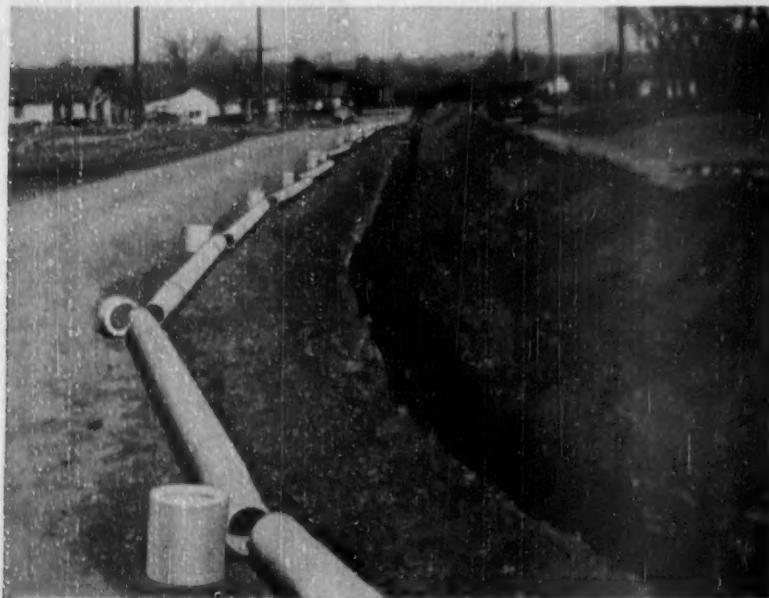


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"... platforms will be built on land, then barged out to their locations . . ."

RADAR starts on p. 136

to permit use of platforms. The Air Force and Navy guard here with picket ships that are crammed with powerful search radar and weather equipment. The ships are stationed at sea off the California-Oregon-Washington coast to warn of unidentified approaching aircraft, missiles, or submarines.

• Canada—Complementing the U.S. radar net, there is a continual exchange of aircraft identification data between this country and Canada. This is maintained by the Canadian-U.S. "Pine Tree" warning system. Operated by the Royal Canadian Air Force, Pine Tree covers a large part of vast uninhabited central Canada.

The heaviest complex, of course, guards the densely populated areas of Canada's southeastern section.

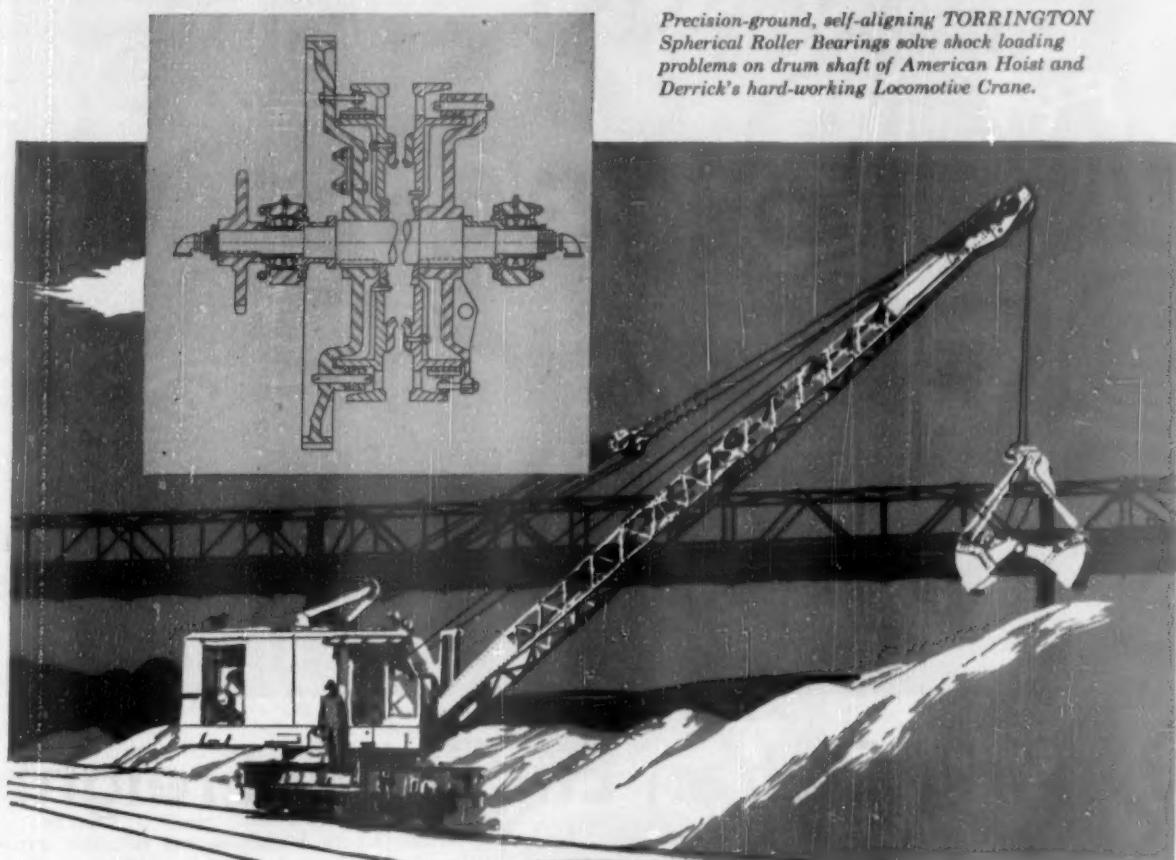
Topping this off, the U.S.—and probably Canada—are installing secret automatic warning units designed to relay by radio the approach, speed, direction, and altitude of any aircraft in the area. These are then checked against flight plans of known planes in the area. If the aircraft are unidentified, they are intercepted.



Life Savers

Three new rubber life rafts go through tests in the Thames River, London. The round ones come in two sizes, one that holds 20 persons and another that's cozy for 10 passengers. They are designed for quick use under the most adverse conditions. The inflatable raft at upper left is mainly for military use. It can be propelled by oars, sail, or outboard motor.

TORRINGTON BEARINGS AT WORK

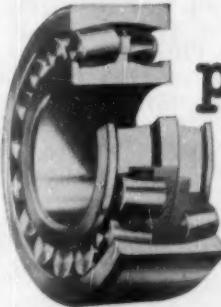


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for freedom of operation. *Integral center flange on inner race*—for positive radial stability and positioning for thrust loads. And self-alignment—for smooth service under shock loads at maximum speeds.

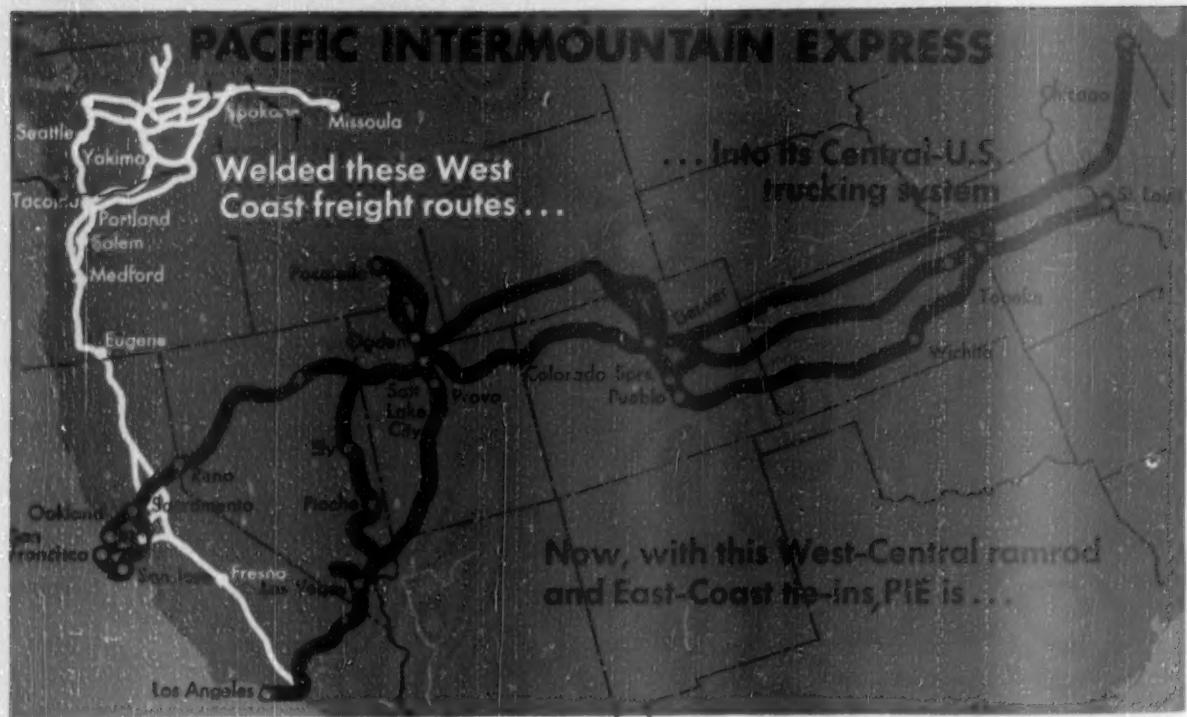
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COMPANIES



Carving Out an Empire in Freight

If Pacific Intermountain Express Co. of California puts over all the deals on its board (map), it will be the second biggest trucker in the U.S. And its rise is not untypical of the blossoming of freight trucking into a respectable big-time industry with all the trappings of corporate responsibility.

In the old days, intercity trucking was a gouging, tumbling, thumb-in-eye sort of business. Often as not, a trucking company was headed by a man who learned all he knew behind the wheel of his own highway rig. Pacific Intermountain didn't have to travel that whole road, but it did start out as a financial flop, back in 1941. It was then that it found orthodoxy was a luxury it couldn't afford. "If somebody told us how other truckers were doing it," says PIE Pres. A. K. Humphries, "that was the last thing we tried. We wanted new ideas, fresh thinking. In hiring new people we favored those who never saw a truck before."

For all its unorthodox methods, PIE found that management strategy and efficiency methods paid off. Recently, PIE, which last year netted \$2.3-million before taxes, took three more giant steps in its drive to become the country's leading over-the-road freighter.

• It entrenched itself as a leading

West Coast shipper by buying West Coast Fast Freight, Inc., of Seattle and its coastal network of freight routes from Seattle to Los Angeles (map above) for \$3.2-million and 60,000 shares of PIE common. The merger will fatten out PIE's 10,500 miles of established overland routes between Chicago and Los Angeles by 5,000 miles of West Coast's route. PIE expects the merger to realize economies of around \$500,000 a year. PIE and West Coast combined revenues of \$42.9-million place them second in the industry only to Associated Transport Co. of New York.

• It contracted to replace nearly all its line-haul trailers by increased capacity vans, and almost half its highway tractors by lighter power units, at a total cost of more than \$5-million less trade-in allowances.

• It has just completed plans for a package-consolidation deal for long-haul parcel post that is expected to bring PIE an added 7-million pounds a year in long-distance freight. PIE has set up a subsidiary, Intermountain Consolidators, Inc., to handle the small-package traffic, expects it to be in operation around Sept. 1.

- Stretching Industry—PIE is one example of the fact that trucking can no

longer be considered just the small brother of railroads. When truckers came under the jurisdiction of Interstate Commerce Commission in 1935 and the gypsies were being swept off the road by the Motor Carriers Act, truckers found they had to play by the same rules already laid down for railroads. Then the postwar world opened the door to traffic expansion. The growing truckers had to face all kinds of competition—among themselves and against other forms of transportation (BW-Mar.20'54,p102).

Last year, there were 22,000 motor carriers scrambling for nearly \$5-billion in revenue. To place among the top 10 haulers, PIE had to hone itself into shape by using every conceivable cost-cutting, service-improving, load-increasing device it could think up. It had to keep a steady flow of traffic loading into its 500 trailers, 250 tractors, and 450 pickup trucks, which last year logged 41.6-million miles, hauled 370,000 tons of shipment.

One of the first problems PIE pounded its head against was geography. Because its system routes only between Chicago and the West Coast, PIE found it was passing up a lot of Atlantic Coast tonnage. A trailer load of freight picked up in San Francisco and destined

for New York had to be unloaded in Chicago, then reloaded into the trailer of a carrier that served New York. Besides delaying the shipment an average of 62 hours in Chicago, this process also subjected the cargo to additional handleings, which boosted loss and damage.

• Seeking a Solution—To overcome this problem, PIE decided to extend its service. There are two ways of doing this. The first way, and the hard way, means proving to ICC that there is need for an extension. It's hard because the railroads and competing truckers will fight you every inch of the road, just as you would fight them. The easier but more expensive way is to buy out some other company that has the routes you want. Some truckers have paid as much as \$1,000 a mile for a 50-mile stretch of freight route.

When PIE tried to push its way into the East by arranging to buy Keeshin Freight Lines, which operates from Chicago to the Atlantic seaboard, ICC turned thumbs down, thereby implying a general repugnance toward additional coast-to-coast freight lines. Only one common carrier, Denver-Chicago Trucking Co., Inc., can boast a single-line cross-country service.

PIE managed to skirt the difficulty by interchanging trailers with Spector Motor Service, which routes from Chicago to the East Coast. Now PIE can load a trailer at Los Angeles, haul it to Spector's Chicago dock, and then have it tracted by Spector to New York. With careful dispatching, total transit time is no greater than for a single-line haul. After four years of operation, PIE's cross-country through-trailer service now accounts for 17% of its total tonnage.

• Beefing Up—One other way PIE has fattened its traffic volume is by concentrating on off-line cities where it maintains full-time salesmen. Formerly, when off-line salesmen contracted a job, they had to engage another carrier to haul the load to PIE's nearest gateway terminal where it was reloaded into one of PIE's line-haul vans. Last March, PIE established a pool of its trailers in each of five off-line cities—Detroit, Milwaukee, Des Moines, Cincinnati, and Cleveland. Now a salesman can promise immediate dispatch for westbound loads from any one of these cities.

A Detroit manufacturer, say, wants to ship a load of auto parts to Los Angeles. He places an order with PIE's off-line salesman at Detroit. A PIE trailer is drawn from the Detroit pool and loaded with the auto parts. Since PIE has no rights to operate in off-line Detroit, it gets an authorized local hauler to tractor the load to the nearest PIE terminal

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2" rubber wheel casters, double race ball bearing	Yes	No	No	Yes
Saddle shaped seat—with foam rubber cushion	Yes	No	No	No
Steel curved padded back	Yes	No	Yes	Yes
Bondedized baked on enamel finish—vinyl coated fabric	Yes	Yes	Yes	Yes

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2" rubber wheel casters, double race ball bearing	Yes	Yes	Yes	Yes
Saddle shaped seat—with foam rubber cushion	Yes	No	Yes	No
Steel curved padded back	Yes	Yes	Yes	Yes
Bondedized baked on enamel finish—vinyl coated fabric	Yes	Yes	Yes	Yes
Zone 1 price (add approx. \$2.00 for Zone 2)	32.50	65.00	49.75	49.50

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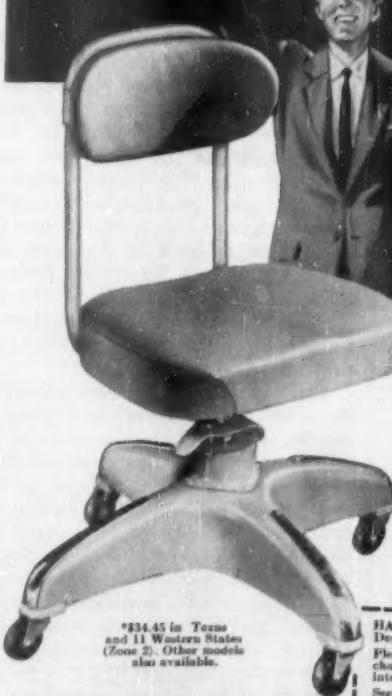
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PIE starts on p. 140

gateway at Chicago. The local hauler—say it's Saginaw Transfer—picks up the PIE trailer at the Detroit pool, gets it loaded at the shipper's dock, and hauls it to Chicago. From Chicago, the trailer—now hooked up to a PIE tractor—takes off for Los Angeles.

• **Two-Way Stretch**—On the return trip from Chicago, Saginaw's tractor picks up an empty PIE trailer, loads it with Detroit-bound shipments, and motors home. In Detroit, the trailer is unloaded and sent back to the PIE pool.

PIE pays Saginaw a fixed percentage of the Detroit-Los Angeles freight rate—the same amount it would get from any other carrier for the same service. In return, Saginaw pays PIE a rental fee for both trailers at so much per mile. With this two-way stretch, PIE can offer through-trailer service from the five key cities, and grab off a handsome piece of the business it otherwise couldn't touch. Last year, 53% of PIE's tonnage originated at, or was consigned to, points on the lines of connecting carriers. Other companies are following PIE's lead in establishing trailer pools.

• **New Business**—Another bit of quick footwork aimed at increasing PIE's traffic volume is its new plan for long-distance hauling of parcel post packages over 20 lb. When the Post Office Dept. cut its service two years ago, companies that shipped merchandise by parcel post started to panic. Some companies have gotten around the cost squeeze by breaking shipments into 20-lb. units. But those that couldn't do this have had to ship by express, freight forwarder, or over-the-road truck—all more expensive than the old parcel post rates.

PIE figured this situation was made to order, because it has specialized in less-than-truckload shipments. Though PIE handles a lot of full truckload shipments, it likes to diversify its market and avoid dependence on a small number of large shippers. PIE surveyed the shipping practices of former parcel post users in Los Angeles and discovered a healthy market for small-parcel service among makers of dinnerware, play-clothes, greeting cards, drugs, shoes, hand tools, and chemicals. On the strength of its findings it decided to move in, setting up Intermountain Consolidators, Inc., to handle the small-package traffic. Until the service gets firmly on its feet, ICI will move shipments only from Los Angeles to Wichita, Kan. Later, the service will

extend to other PIE terminal cities.

• **How It Works**—PIE has mapped out about 40 key cities as break-bulk points. They are so spotted that virtually any destination east of Wichita lies within the second postal zone of at least one of the 40 cities, in some cases two. The Post Office has established a 40-lb. limit in local, first, and second postal zones—or up to 150 miles from the point of pickup. PIE will be authorized to apply postmarks at Los Angeles for each of the break-bulk points. When shippers send their up-to-40-lb. packages to the ICI depot at PIE's Los Angeles terminal, ICI will accept them as agent for the shipper and consolidate them into bulk shipments for the appropriate break-bulk points. PIE will then consign bulk containers of parcels to the proper postmasters, who will dispatch the parcels by parcel post.

• **Bigger and Better**—Not all of the weight-lifting PIE has used to broaden its business has been in opening new markets. It has also concentrated on ways to carry more business faster, cheaper, and in less space. PIE's Pres. Humphries constantly scrutinizes his equipment for every possible cubic inch of shipping space. One way he found to squeeze more load into a truck's allowable road space was by revamping the trailers. "We couldn't make them any higher or longer or wider," Humphries says. "The only way we could gain cube was to lower the floor and thin the walls."

When Humphries presented his case to the trailer manufacturers, they shook their heads. But Humphries figured a way to do it. He installed smaller wheels and special tires. This dropped the trailer floor four in. Then Humphries threw away the trailer's steel springs and substituted air-filled rubber sacks, made by General Tire & Rubber Co. On springs, a trailer of maximum legal height loses several inches when loaded. But with air-suspension, the trailer has the same exterior height whether loaded or unloaded. This permits full loading without risk of violating the law after the load is discharged.

• **New Equipment**—Humphries also gained five in. in horizontal loading space by reshaping the structural members of the trailer walls. PIE trailers now get 18% more loading space, or the equivalent of 6,000 lb. in additional shipment. Humphries has ordered 476 of the spacious trailers from Fruehauf, Brown of Spokane, and Strick Co. of Philadelphia. They're now being delivered a few at a time. Humphries has also ordered 102 light-weight tractors from International Harvester Co. for its east-of-Denver service where weight limits are lower.

With its new trailer fleet, Humphries predicts PIE's per-mile revenue of

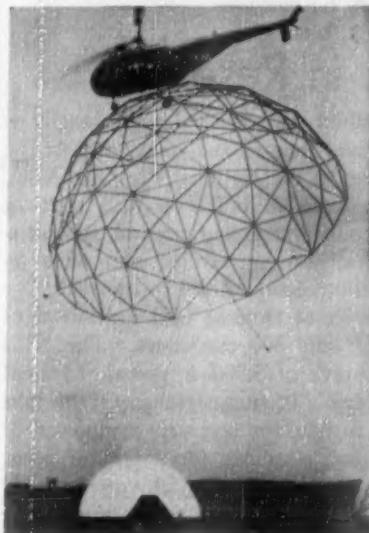
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nearly 54¢ for 1953 will jump to over 63¢ per mile—even more, depending on how much PIE can trim operating costs on the 18% increase in load.

• **New Ideas**—Humphries, who roams about the country hunting ideas, or broods over equipment designs at his California cattle ranch, has a few more cost-savers in the hopper. His shop is now working on a radical front-end design for PIE's four-year-old tractor design, dubbed the Dromedary (BW—Oct. 14 '50, p21). The Dromedary carries extra payload in its "hump" when local gross limits permit.

• **Cost Savers**—Humphries thinks that organization, imagination, and responsibility are the keys to PIE's success. When he decides to broom out hidden costs, he sweeps every corner.

One plan that has paid off is PIE's highway safety campaign, which Humphries and C. E. Johnson, PIE's executive vice-president, launched six years ago. Since its inception, PIE's safety campaign has netted 572 of the company's drivers some \$24,000 in safe-driving awards. And for PIE, the plan has helped it enjoy one of the lowest insurance rates in the business. In the past seven years, PIE has slashed its total insurance and safety costs 42%, now pays only 3¢ per dollar of revenue, as against an average 5.2¢ for the rest of the Class 1 intercity common carriers.



Portable Hangar

A light-weight, low-cost, portable hangar that can be air-lifted by helicopter (above) was tested recently by Marine Corps technicians at Quantico, Va. The 50-ft., 1,800-lb. hangar has a magnesium frame that, in use, wears a vinyl-coated cover. A smaller version (background) can be used as a field office.

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Aiding Expansion

The tax revision bill that Congress has just adopted makes all sorts of changes in our cumbersome revenue code. Almost all of them are healthy changes, and most of them are important. But none is healthier or more important than the revision of the rules for handling depreciation charges (BW—Aug. 7 '54, p48).

By liberalizing the depreciation rules, Congress has made an effort to gear the tax system to the requirements of an expanding economy. In the long run, this may turn out to be one of the most important economic accomplishments of the Eisenhower Administration.

The arithmetic of the new rules is complicated. The basic principle is perfectly simple: Hereafter, businessmen will have more freedom in deducting the costs of new investment from taxable income. If they like, they will be able to charge off a larger proportion of their new plant and equipment in the early years of its life.

In many ways, the new rules don't go far enough. They still leave the businessman only limited discretion in deciding how fast he can charge off the cost of new investment. The Treasury's famous Bulletin F, rather than management's best judgment, remains the standard for estimating the useful life of a new asset.

Even so, the revised rules will go a long way toward making business investment a stabilizing element in the economy. They will encourage expansion in two ways:

- Companies that see a need for new capacity will be more willing to build it if they can count on a faster recovery of their investment.
- The depreciation reserves that accumulate will provide a source of funds for further expansion.

Studying the new rules, we are struck with the fact that a relatively simple and inexpensive change in the tax laws can make so much difference in the economic impact of the tax system. We welcome the evidence that Congress finally is trying to design a tax system that will put the least possible restraint on the growth of the economy. And we are impressed by the fact that, in this respect at least, public policy has come a long way in 20 years. For it was just 20 years ago—at the pit of the Great Depression—that the Treasury tightened up depreciation rules drastically, in an effort to squeeze more money out of business taxes.

The rules that were adopted in 1934 undoubtedly contributed their bit to the stagnation of the 1930s. The new rules, as business gradually becomes familiar with them, will help to keep that sort of stagnation from happening again.

The Novelist's Insight

The impact of our industrial civilization on society is the subject of a brilliant study by Nigel Balchin, who has gained a measure of fame as a novelist (*Small Back Room, My Own Executioner*), rather than as a social scientist or specialist in industrial management.

In taking a fresh look, Balchin questions many atti-

tudes that have been taken for granted. For example, he doubts whether people would demand an increasing standard of living if they knew the price they had to pay was harder work. What many workers really want, he states, is to increase their own living standards without increased effort. This means that they want "a bigger share of what is being produced already," which would mean lesser shares for everybody else.

Balchin also rails against the notion that the dullness associated with industrial work is inevitable. He feels that much of the "dullness and pointlessness" could be removed with a consequent gain in output. As he sees it, "a man will work hard to keep himself and his dependents from starvation . . . but with every step upward . . . the appeal of the material reward decreases."

There is much truth in Balchin's comments, although American businessmen, in particular, have come a long way in solving many of the problems posed by industrialization. The very complexity of an industrialized society has given rise to a whole new field, the "behavior sciences," which are explored in a three-part Special Report beginning in this week's issue (page 50).

Balchin, of course, does not pretend to any scientific or special knowledge, but he has other qualifications, insight and perception.

All too often these talents are ignored by practical people. Yet we have learned as much about what makes people tick from writers—Shakespeare, for instance—as from social scientists. We think that businessmen should pay more attention to what our artists think. At the same time, we hope that artists pay more heed to the problems that concern businessmen.

Executives in Reserve

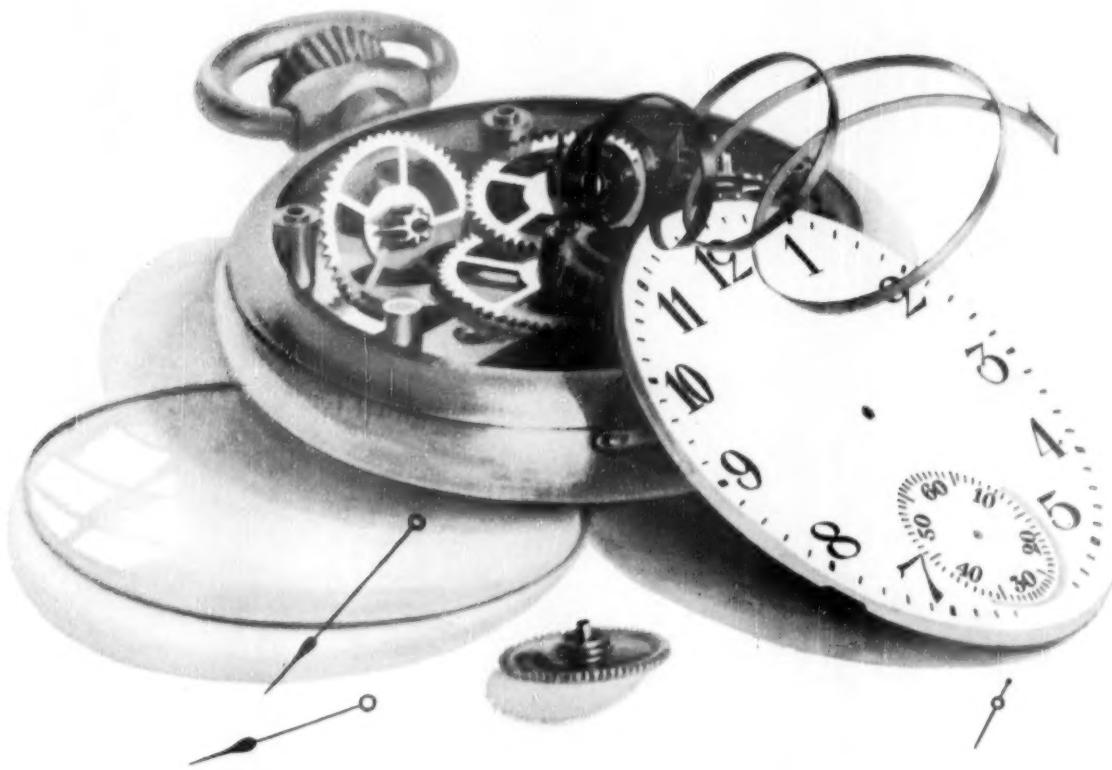
The constant possibility of all-out war has taught us the need for arming and training the young men of the nation. But according to the National Planning Assn., we have largely neglected to build up to a state of readiness another group—the executives and specialists from business, unions, and universities who serve on the civilian side of the defense effort.

At present, the Office of Defense Mobilization plans for a firm reserve of only 300 executives. The NPA considers that a "reserve of 5,000 is probably closer" to the number needed. It suggests that ODM take charge of a program to train the necessary manpower.

In selecting executive personnel for important posts, the study warns against the many pitfalls involved. It advises against men who are offered only because their skills are not needed by their organizations in wartime. And it cautions care in taking men at or near retirement age, citing the fact that executives with World War II experience had a mortality rate of 11.8% when recalled during the first year of the Korean War.

We think that the NPA has performed a real service in pointing up the need for executive personnel. We hope that the current review of our manpower needs by the Dept. of Defense will be matched by an examination of the needs of our government in time of war.

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